DOCUMENT RESUME

ED 080 803 CE 000 016

TITLE A Guide to Health Manpower Resources--1970.
INSTITUTION Washington State Dept. of Social and Health Services, Olympia.; Washington State Planning and Community Affairs Agency, Olympia.
SPONS AGENCY Community Health Service (DHEW/PHS), Bethesda, Md.; National Institutes of Health (DHEW), Bethesda, Md. Bureau of Health Manpower Education.
PUB DATE May 71
NOTE 182p.

EDRS PRICE MF-$0.65 HC-$6.58
DESCRIPTORS *Health Occupations; *Health Occupations Education; *Health Personnel; Medical Education; *Occupational Information; State Surveys; Statistical Data
IDENTIFIERS *Washington State

ABSTRACT

The stated objective of this guide is to provide a quantitative description of the current supply of health manpower in the State of Washington. To do so, two methods of data collecting are used, with explanations for each. Precautions for interpreting their data are noted. The major portion (152 of 180 pages) of the guide lists information on licensing regulations, professional functions, and educational prerequisites, and tabulated quantitative data for these occupations: chiropractors, dental hygienists, dentists, dietitians and nutritionists, dispensing opticians, drugless therapeutics, licensed practical nurses, nursing home administrators, optometry, doctors of osteopathy, pharmacists, physical therapists, physician-surgeons, podiatrists, psychologists, registered nurses, sanipractors, sanitarians, and veterinarians. A brief bibliography is provided for each category. The guide concludes with a thirteen page section providing information concerning the types and location of health programs available in Washington. (AG)

FILMED FROM BEST AVAILABLE CO

ED 080803

A Guide to
HEALTH MANPOWER RESOURCES
1970

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CE

education

licensure

employment

STATE of WASHINGTON

**Prepared by Planning and Community Affairs Agency
and the Department of Social and Health Services**

NONDISCRIMINATION. No person in the State of Washington shall, on the grounds of sex, race, color or national origin, be excluded from participation in or be subjected to discrimination under any program or activity administered or supervised by the Washington State Department of Social and Health Services.

COVER: The cover design symbolizes a major concern of researchers and planners in the field of health manpower: To what extent are people trained but not licensed, trained but not in practice if licensure is not required, or licensed but not in practice? The contents of this report are a contribution to understanding the question. Hopefully others will find this data useful in answering this and related questions about effective, efficient utilization of this valuable resource.

A GUIDE TO HEALTH MANPOWER RESOURCES -- 1970

May 1971

This publication was supported in part by Health Services and Mental Health Administration Grant Number 90416 awarded by the Community Health Service, Health Services and Mental Health Administration, Public Health Service, Department of Health, Education and Welfare; and by Contract Number 71-4018 National Institute of Health, Bureau of Health Manpower Education, Division of Manpower Intelligence, National Clearinghouse Branch.

State of Washington

Daniel J. Evans, Governor

Department of
Social and Health Services

Sidney E. Smith
Secretary

Wallace Lane, M.D.,M.P.H.
Assistant Secretary
Division of Health

Jess B. Spielholz, M.D., M.P.H.
Deputy Assistant Secretary
Office of Health Services

Ilse J. Volinn, Ph.D.
Project Administrator
Health Manpower Project

Planning and Community Affairs
Agency

Richard H. Slavin, Ph.D.
Director

Frank D. Baker
Administrator
Comprehensive Health Planning
Office

CONTENTS

Page

Tables iii

Figures vi

Introduction 1

Professions

- Chiropractors 7
- Dental Hygienists 17
- Dentists 27
- Dietitians & Nutritionists 35
- Dispensing Opticians 41
- Drugless Therapeutics (Naturopaths) 49
- Licensed Practical Nurses 57
- Nursing Home Administrator 67
- Optometry 73
- Doctor of Osteopathy 77
- Pharmacist 87
- Physical Therapist 93
- Physician-Surgeon 99
- Podiatrist 121
- Psychologist 131
- Registered Nurse 137
- Sanipractor 147
- Sanitarian 149
- Veterinarian 159

Health Manpower Training Programs In Washington State 167

TABLES

Page

1. Chiropractors Licensed In and Residing In Washington State by Participation in the Labor Force 10

2. Information on Chiropractors Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 13

3. Dental Hygienists Licensed In and Residing In Washington State by Participation in the Labor Force 20

4. Information on Dental Hygienists Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 23

5. Information on Dentistry Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 31

6. Dietitians and Nutritionists Residing In Washington State by Participation in the Labor Force 37

7. Dispensing Opticians Licensed In and Residing In Washington State by Participation in the Labor Force 43

8. Information on Dispensing Opticians Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 46

9. Drugless Therapeutics (Naturopaths) Licensed In and Residing In Washington State by Participation in the Labor Force 51

10. Information on Drugless Therapeutics (Naturopaths) Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal. 54

11. Practical Nurses Licensed In and Residing In Washington State by Participation in the Labor Force 60

12. Information on Practical Nursing Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 63

13. Information on Nursing Home Administrators Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 69

14. Information on Optometrists Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 74

Tables (Continued)

Page

15. Osteopaths Licensed In and Residing In Washington State by Participation in the Labor Force 80

16. Information on Osteopathic Physicians and Surgeons Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 83

17. Information on Pharmacy Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 90

18. Information on Physical Therapists Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 95

19. Medical Physicians Licensed In and Residing In Washington State by Participation in the Labor Force 102

20. Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970 106

21. Information on Physicians and Surgeons Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 118

22. Podiatrists Licensed In and Residing In Washington State by Participation in the Labor Force 124

23. Information on Chiropody and Podiatry Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 127

24. Information on Psychologists Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 133

25. Registered Nurses Licensed In and Residing In Washington State by Participation in the Labor Force 141

26. Information on Registered Nurses Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal. 144

27. Sanitarians Licensed In and Residing In Washington State by Participation in the Labor Force 152

28. Information on Sanitarians Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 155

29. Veterinarians Licensed In and Residing In Washington State by Participation in the Labor Force 161

Tables (Continued

Page

30. Information on Veterinarians Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal 164

31. Educational Levels Available by Program 170

32. Percentage of Schools Offering One or More Health Programs 173

33. Location of Health Occupation Training Programs 174

FIGURES

Page

1. Distribution by County of Chiropractors Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 12
2. Distribution by County of Dental Hygienists Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 22
3. Distribution by County of Dietitians and Nutritionists Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 39
4. Distribution by County of Dispensing Opticians Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 45
5. Distribution by County of Drugless Therapeutics (Naturopaths) Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 53
6. Distribution by County of Licensed Practical Nurses Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 62
7. Distribution by County of Osteopathic Physicians Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 82
8. Distribution by County of Physicians and Surgeons Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 104
9. Distribution by County of Podiatrists Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 126
10. Distribution by County of Registered Nurses Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 143
11. Distribution by County of Sanitarians Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional 154
12. Distribution by County of Veterinarians Currently Active and Residing In Washington State by Number 163
13. The Community College System, State of Washington 180

A HEALTH MANPOWER RESOURCE GUIDE

INTRODUCTION

The goal of this resource guide is to provide a quantitative description of the current supply of health manpower in the State of Washington. During the planning and publication stages, it was referred to as "The Blue Book"; hence, this abbreviated title.

Great efforts have been made to supply "hard data". Limitations on the information included will be indicated. The different sources of the data as well as the methodologies used in data gathering will be discussed in this introductory chapter. In order to avoid repetition, most such explanations are omitted from the text.

Sponsorship of THE BLUE BOOK

Data gathering and publication of this volume are co-sponsored by the Office of Comprehensive Health Planning (CHP) (Planning and Community Affairs Agency) and the Health Manpower Project (HMP), Division of Health, Department of Social and Health Services. The Division of Professional Licensing, Department of Motor Vehicles (MOT), hereafter referred to as Division of Professional Licensing, cooperated in special surveys of licensed health professionals and in addition made statistical information gathered through licensing procedures available. Several professional associations made great contributions through co-sponsorship of surveys, assistance in questionnaire construction and data interpretation. The Blue Book includes information on many, but not all health occupations. The reader should keep in mind that it is neither all inclusive nor exhaustive. An established mechanism for data gathering concerning health professionals is the basis for greater emphasis on these licensed occupations compared to unlicensed ones. Timing of licensure renewal also influenced the content, as in the case of physical therapists who renew their license every three years. We are well aware of the many omitted health occupations which contribute to the welfare of the population as much as those professions mentioned in the report. Hopefully, this shortcoming might be remedied in the future.

Information concerning the training of health professionals is derived from the following sources:

A. Surveys conducted by the Health Manpower Project in 1970
B. Catalogues supplied by the various educational institutions
C. Data provided by the State Board for Community College Education
D. Data from the Division of Vocational Education

Supplementary information was obtained from the references listed in the section on health occupations training programs.

Methodology

In their comprehensive studies of the health occupations, the Health Manpower Project staff has conducted surveys utilizing two methods, as described below. Some of the data collected on each occupation have been included in The Blue Book. Complete reports based on these surveys are available at the State Library (Olympia) or the Health Manpower Project office, 815 Smith Tower, Seattle, 98104.

Data Based on Project Surveys

1) Most licensed health occupations included in this volume were surveyed by the Project in cooperation with the Division of Professional Licensing. At the time of license renewals, a questionnaire the size of a data processing card was inserted with each renewal form. Questions have been formulated by the Project staff in cooperation with representatives of the profession under study. The Health Manpower Project was responsible for data processing and analysis.

2) Three health occupations were surveyed directly by the Project through co-sponsorship with the respective professional associations: Doctors of Osteopathy, speech pathologists and audiologists, and nutritionists and dietitians. Since these questionnaires were not restricted to any particular format or size, more extensive information could be gathered than was possible with health professions surveyed at licensure renewal. Reports based on these surveys will be available during mid-1971.

Data Furnished by the Division of Professional Licensing

The Division of Professional Licensing, Department of Motor Vehicles, periodically compiles information on the licensed health professions. This is done when an applicant applies for a license in Washington State and when he renews his license thereafter. In most cases renewal is annual.

A computer print-out which included the number of active licensees residing in Washington in each health occupation was made available for The Blue Book compilation. Data on the profession of pharmacy was made available to the Project by the Division of Professional Licensing with the approval of the State Board of Pharmacy, Olympia, Washington.

Interpretation of Data in THE BLUE BOOK

The interpretation and reliability of data are partially determined by the method of data gathering. Unless the reader is aware of differences in method, inaccurate interpretation could occur.

Data based on Project surveys: The response rate, although high, is always less than 100%. This is a characteristic of the survey method. Typical response rates to surveys range from 30% to 60%; however, Project surveys range from a low of 50% to a high of 97%. Response rate is always stated in the section called "The Health Manpower Project Survey" which precedes statistical information on a specified profession. Further, respondents may not reply to all the questions asked on a questionnaire form. Example: the number of respondents who specify their county of residence may differ from the number specifying their state of residence. Incompleteness in answers accounts for some slight differences in county data within a table (marginals) and the total for the state.

In Project surveys, questions were asked about involvement in the labor force. The designation "active" and "inactive" used in the statistical tables based on Project data refers to active participation (employment) in the labor force.

Data furnished by the Division of Professional Licensing: A licensed health professional can maintain his eligibility to practice only by holding current licensure. Therefore data furnished by the Division of Professional Licensing represents all (100%) of the licensed health professionals. This fact does not imply that an active licensee is active in the labor force. Many retired, temporarily unemployed and indefinitely unemployed health professionals maintain active licensure in the event they should return to the work force. Example: Although the number of registered nurses holding active licenses is very large, it is an established fact that only about half of this female-dominated profession will be employed full-time at any particular time.

These differences in the meaning of both survey data and licensure data should assist the reader in the use of the different totals of health professionals found in the respective tables.

Derivation of Section on "Description of the Profession"

Summaries from the law regulating licensure on each licensed occupation were compiled in order to provide an overall description. Additional details not found in the licensing law were added through drawing from the literature and from consultation with particularly knowledgeable experts in the respective field.

The bibliographic list refers not only to references utilized directly in the text, but includes others offering pertinent information. No attempt was made to produce an all-inclusive bibliography. Stimulation for further reading was the goal.

Population Data Source

The final counts of the 1970 Census were not available at the time of compilation of The Blue Book. Accordingly, preliminary counts of the 1970 Census as distributed by the Office of Program Planning and Fiscal Management, State of Washington, Olympia, were used throughout this volume. The only exception was ratios utilizing population to active licensee for years prior to 1970. Population estimates of the respective years were used (i.e., 1967).

A Preliminary Index of Need for Health Manpower

The limitation of using ratios of persons to health professional within specified geographic areas has been widely determined in the literature. In spite of the awareness of the shortcoming of that index, such ratios were computed for inclusion in this report because more refined indexes are not available at the present time.

The ratio of persons to employed health professional has been selected, instead of the reverse ratio which yields "fractions of persons."

Use of these ratios again warrants consideration of the methodology used in data gathering: 1) Health Manpower survey data having as a base health professionals licensed in this state and active in their respective health profession. 2) Licensing figures referring to a complete census of health professionals but without indication of their active participation in the labor force.

Information on Health Facilities

The current volume does not include information on health facilities as did the 1968 Health Manpower Resource Book published by CHP. The reason for this omission is that a survey of hospitals is currently in progress. It is co-sponsored by the Washington Hospital Association, the Health Facilities licensing section of the Division of Health and the Health Manpower Project, Division of Health. That report, expected to be completed during spring 1971, will include information on a great variety of health professionals and allied health personnel concerning their current employment as well as budgeted, non-budgeted, and projected vacancies.

Utilization of Data

A variety of agencies as well as individuals have been requesting information concerning the supply of health manpower within this state. The specified goal has been to utilize this information as a basis for planning future demand and need for specified categories of health manpower. In order to accomplish this goal the following preparatory steps should be taken: the construction of clear, operational definitions of the following concepts.

1. "Need" for personnel, based on specifications by "experts" concerning standards furthering all aspects of health principles.
2. "Demand" for personnel, based on economic principles. Unless demand is further related to specified categories of initiators of such demand, the concept cannot be translated into operational terms. For that reason it is imperative to identify such correlates of demand as follows: Population data by age, income, education, rural-urban residency; morbidity conditions specifying chronic versus acute diseases, and an index of severity. Variations in prepayment coverage should be considered.

Unless the information concerning the supply of health manpower is skillfully related to demand and need variables, projections cannot be undertaken. Some guidelines can be found in the literature cited at the end of this chapter.

Studies of additional health professions are being conducted. Reports on speech pathologists, physical therapists and health educators should be available by fall 1971.

REFERENCES

FELDSTEIN, PAUL J. "Research on the Demand for Health Services" Milbank Memorial Fund Quarterly, July 1966, Vol. XLIV, No. 3, Part 2

GROSS, EDWARD. "When Occupations Meet, Profession in Trouble" Hospital Administration, Summer 1967, Vol. XII, No. 3.

HIESTAND, DALE L. "Research into Manpower for Health Services" Milbank Memorial Fund Quarterly, October 1966, Vol. XLIV, No. 4, Part 2

KLARMAN, HERBERT E. "The Economics of Health" 1965. Columbia University Press

O'DONAHUE, JOHN. "Developing a Conceptual Framework For Planning" Hospital Administration, Fall 1969, Vol. XIV, No. 4.

ROSENTHAL, GERALD D. "The Demand for General Hospital Facilities" 1964. American Hospital Association

YOUNG, ROBERT C. "The Financial Barrier to Health Insurance Benefits: A Case Study". Inquiry. September 1970, Vol. VII, No. 3

PROFESSIONS

CHIROPRACTORS

Licensing Regulations

The following legal description of chiropractors is a summary from the law regulating the practice of chiropractic in Washington State.(1)

Scope of Licensee's Function

Any chiropractor may adjust by hand any articulation of the spine, but shall not prescribe for noradminister to any person any medicine or drugs now or hereafter included in materia medica, nor practice obstetrics, nor practice osteopathy or surgery.

Educational Prerequisites

Be a graduate of a chiropractic school or college accredited and approved by the board of chiropratic examiners and show satisfactory evidence of completion of a resident course of study of not less than four thousand classroom hours of instruction in such school or college.

Pass an examination made by the board of chiropractic examiners. All examinations shall be made in writing, the subject of which shall be anatomy, physiology, hygiene, symptomatology, nerve-tracing, chiropractic-orthopedy, principles of chiropractic and adjusting, as taught by the chiropractic schools and colleges.

Reciprocity

Persons licensed to practice chiropractic under the laws of any other state having equal requirements of this chapter, may, in the discretion of the director, be issued a license to practice in this state without examination, upon payment of the fee of twenty-five dollars as herein provided.

PROFESSIONAL FUNCTIONS

In order to gather more details concerning chiropractic, publications of two colleges of chiropractic(2 and 3) were secured and the Washington

State Chiropractic Association, Inc., was contacted. The following information is based on personal communication with the president of the professional association (letter dated October 17, 1970) and on statements included in the college bulletins.

> Chiropractic is based on the premise that the relationship between structure and function in the human body is a significant health factor and that such relationships between the spinal column and the nervous system are the most significant, since the normal transmission and expression of nerve energy are essential to the restoration and maintenance of health.
>
> Chiropractic shall be defined in accordance with the foregoing principles as follows:
>
> "Chiropractic is that science and art which utilizes the inherent recuperative powers of the body and the relationship between the musculo-skeletal structures and functions of the body, particularly of the spinal column and the nervous system, in the restoration and the maintenance of health."
>
> The practices and procedures, which may be employed by doctors of chiropractic, consistent with statutes regulating the profession in the various states are based upon the academic and clinical training received in accredited chiropractic colleges.

According to the Washington Chiropractors Association, Inc., the chiropractic profession may be described in the simplest terms as follows:

> The doctor of chiropractic is a health service professional that treats primarily neuro-musculo-skeletal disorders of humans chiefly by manipulation of "adjustment" of the body structure, principally the spinal column and its adjacent tissues.

THE HEALTH MANPOWER PROJECT SURVEY

A survey of all chiropractors licensed in Washington as of July 1969 was conducted by the Health Manpower Project.(4) Of the 386 chiropractors who renewed their licenses as of March 1969, 83% responded to the survey. Eighty-two percent of those licensed in Washington were professionally located in the state, with the majority in urban counties. Overall, professional location was more rural, however, than that found in some other health occupations.

Eighty-nine percent of the Washington residents were actively practicing and 6% were in another occupation. Although most respondents engaged in a variety of tasks, 89% indicated their major work function was direct patient care. About a third of the chiropractors worked 40 to 49 hours in a typical week, another third between 30 and 39 hours.

Slightly over half of the chiropractors were under the age of 45; 8% were females. The most frequently reported professional degree (88%) was the Doctor of Chiropractic; over half of all professional degrees were granted from Iowan educational institutions. Fifty-one percent reported one or more years of college attendance outside of their chiropractic education. Sixteen percent reported degrees in addition to their professional degrees, these ranged from the Associate of Arts Degree to the Master of Arts.

Further information on continuing education participation and licensure characteristics were discussed in the Health Manpower Project report.(4)

The following table provides some overall information which had been gathered at the time of the Health Manpower Project survey. Geographic regions of the state where professionally active chiropractors were located can be discerned. Counties in which no chiropractors were located are: San Juan, Pacific, Wahkiakum, Skamania, Okanogan, Ferry, Lincoln, Adams, Pend Oreille, Garfield and Columbia.

Table 1 Chiropractors Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
NORTH COAST	5	4	80%	0	1	11,186:1
Clallam	4	3	75%	0	1	11,503:1
Jefferson	1	1	100%	0	0	10,232:1
SOUTH COAST	9	8	89%	0	1	9,357:1
Grays Harbor	9	8	89%	0	1	7,444:1
Pacific	0	0	0	0	0	15,308:0
NORTH PUGET SOUND	15	14	93%	0	0	11,569:1
Island	2	2	100%	0	0	12,950:1
San Juan	0	0	0	0	0	3,542:0
Skagit	6	6	100%	0	0	8,524:1
Whatcom	7	6	86%	0	0	13,563:1
CENTRAL PUGET SOUND	144	127	88%	4	12	14,951:1
King	69	60	87%	3	5	18,902:1
Kitsap	11	11	100%	0	0	8,837:1
Pierce	35	33	94%	0	2	12,280:1
Snohomish	29	23	79%	1	5	11,398:1
SOUTH PUGET SOUND	16	12	75%	3	0	11,652:1
Lewis	6	5	83%	1	0	8,897:1
Mason	2	1	50%	1	0	19,975:1
Thurston	8	6	75%	1	0	12,572:1
LOWER COLUMBIA	14	13	93%	1	0	11,088:1
Clark	11	11	100%	0	0	11,495:1
Klickitat	3	2	67%	1	0	5,980:1
Skamania	0	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	4	4	100%	0	0	17,948:1
Cowlitz	4	4	100%	0	0	17,113:1
Wahkiakum	0	0	0	0	0	3,343:0
UPPER COLUMBIA	7	7	100%	0	0	11,458:1
Chelan	6	6	100%	0	0	6,537:1
Douglas	1	1	100%	0	0	16,227:1
Okanogan	0	0	0	0	0	24,758:0

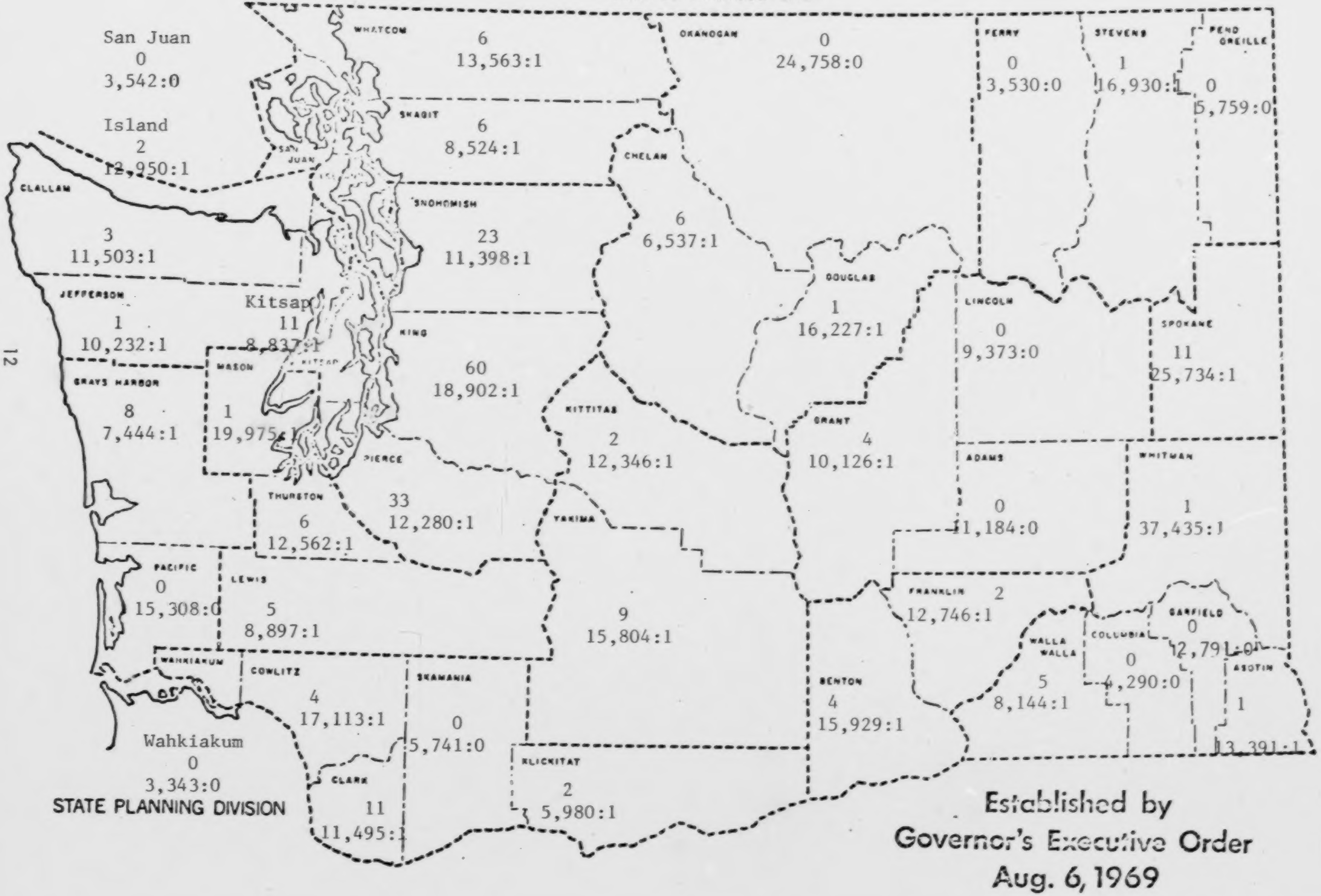
Table 1 Chiropractors (Continued)

Planning Region and County	Number Residing	Professionally Active Number	%	Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
YAKIMA VALLEY	13	11	85%	0	0	15,175:1
Kittitas	2	2	100%	0	0	12,346:1
Yakima	11	9	82%	0	0	15,804:1
COLUMBIA BASIN	4	4	100%	0	0	15,265:1
Adams	0	0	0	0	0	11,184:0
Grant	4	4	100%	0	0	10,126:1
Lincoln	0	0	0	0	0	9,373:0
FOUR RIVERS	6	6	100%	0	0	14,868:1
Benton	4	4	100%	0	0	15,929:1
Franklin	2	2	100%	0	0	12,746:1
NORTH EAST	1	1	100%	0	0	26,219:1
Ferry	0	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	0	5,759:0
Stevens	1	1	100%	0	0	16,930:1
SPOKANE	14	11	79%	0	3	25,734:1
Spokane	14	11	79%	0	3	25,734:1
SOUTH EAST	2	2	100%	0	0	26,809:1
Asotin	1	1	100%	0	0	13,391:1
Garfield	0	0	0	0	0	2,791:0
Whitman	1	1	100%	0	0	37,435:1
BLUE MOUNTAIN	5	5	100%	0	0	9,002:1
Columbia	0	0	0	0	0	4,290:0
Walla Walla	5	5	100%	0	0	8,144:1
STATE TOTAL	259	229	88%	8	17	14,591:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals

Figure 1 Distribution by County of Chiropractors Currently Active and Residing in Washington State by Number and Ratio of Population Per Active Professional


San Juan
0
3,542:0
Island
2
12,950:1
WHATCOM
6
13,563:1
OKANOGAN
0
24,758:0
FERRY
0
3,530:0
STEVENS
1
16,930:1
PEND OREILLE
0
5,759:0
SKAGIT
6
8,524:1
SAN JUAN
CLALLAM
3
11,503:1
CHELAN
6
6,537:1
SNOHOMISH
23
11,398:1
JEFFERSON
1
10,232:1
Kitsap
11
8,837:1
KITSAP
KING
60
18,902:1
DOUGLAS
1
16,227:1
LINCOLN
0
9,373:0
SPOKANE
11
25,734:1
GRAYS HARBOR
8
7,444:1
MASON
1
19,975:1
KITTITAS
2
12,346:1
GRANT
4
10,126:1
ADAMS
0
11,184:0
WHITMAN
1
37,435:1
PIERCE
33
12,280:1
THURSTON
6
12,562:1
YAKIMA
9
15,804:1
PACIFIC
0
15,308:0
LEWIS
5
8,897:1
FRANKLIN
2
12,746:1
GARFIELD
0
2,791:0
COLUMBIA
0
4,290:0
WALLA WALLA
5
8,144:1
ASOTIN
1
13,391:1
WAHKIAKUM
COWLITZ
4
17,113:1
SKAMANIA
0
5,741:0
BENTON
4
15,929:1
Wahkiakum
0
3,343:0
CLARK
11
11,495:1
KLICKITAT
2
5,980:1
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

Information based on the annual renewal of licenses differs somewhat from survey data. It is more inclusive since all license holders are obligated to complete the forms. It is more restrictive since renewal of license forms ask for fewer details than the survey questionnaires.

Table 2 Information on Chiropractors Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	3	14,153:1	4	11,000:1	4	11,186:1
Clallam	3	10,927:1	4	8,375:1	4	8,628:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	7	10,867:1	8	9,888:1	8	9,357:1
Grays Harbor	7	8,603:1	8	7,813:1	8	7,444:1
Pacific	0	16,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	16	10,139:1	16	10,669:1	16	10,123:1
Island	2	12,022:1	2	12,350:1	2	12,950:1
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	3	18,000:1	5	11,000:1	5	10,229:1
Whatcom	11	7,436:1	9	9,733:1	9	9,042:1
CENTRAL PUGET SOUND	179	10,062:1	177	10,592:1	189	10,046:1
King	89	12,194:1	85	13,168:1	84	13,502:1
Kitsap	13	7,412:1	12	8,567:1	13	7,478:1
Pierce	48	8,060:1	52	7,567:1	59	6,868:1
Snohomish	29	8,023:1	28	9,257:1	33	7,944:1
SOUTH PUGET SOUND	14	9,478:1	13	11,108:1	13	10,756:1
Lewis	6	7,949:1	6	8,083:1	6	7,414:1
Mason	2	9,944:1	1	20,700:1	1	19,975:1
Thurston	6	11,118:1	6	12,533:1	6	12,562:1
LOWER COLUMBIA	12	11,369:1	13	11,685:1	12	12,012:1
Clark	10	11,682:1	11	11,991:1	10	12,645:1
Klickitat	2	6,818:1	2	6,650:1	2	5,980:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	8	9,115:1	8	9,663:1	8	8,974:1
Cowlitz	8	8,644:1	8	9,138:1	8	8,526:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0

Table 2 Chiropractors (continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	10	8,738:1	11	8,164:1	13	6,170:1
Chelan	6	7,149:1	6	7,217:1	8	4,903:1
Douglas	3	5,628:1	3	6,333:1	3	5,409:1
Okanogan	1	27,601:1	2	13,750:1	2	12,379:1
YAKIMA VALLEY	18	10,173:1	17	10,900:1	17	9,819:1
Kittitas	4	5,737:1	4	6,325:1	4	6,173:1
Yakima	14	11,440:1	13	12,308:1	13	10,941:1
COLUMBIA BASIN	7	9,400:1	9	7,370:1	9	6,785:1
Adams	1	11,791:1	1	12,000:1	1	11,184:1
Grant	6	7,230:1	8	5,516:1	8	5,063:1
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	6	16,513:1	6	16,750:1	7	12,744:1
Benton	4	17,898:1	4	18,200:1	5	12,743:1
Franklin	2	13,742:1	2	13,850:1	2	12,746:1
NORTH EAST	2	14,358:1	2	14,200:1	2	13,110:1
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	1	7,201:1	1	6,500:1	1	5,759:1
Stevens	1	17,616:1	1	18,300:1	1	16,930:1
SPOKANE	23	13,042:1	26	11,539:1	25	11,323:1
Spokane	23	13,042:1	26	11,539:1	25	11,323:1
SOUTH EAST	2	26,601:1	2	27,450:1	3	17,872:1
Asotin	1	14,435:1	1	14,800:1	1	13,391:1
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	1	35,463:1	1	36,400:1	2	18,718:1
BLUE MOUNTAIN	7	7,230:1	7	7.129:1	7	6,430:1
Columbia	0	5,005:0	0	5,000:0	0	5,290:0
Walla Walla	7	6,515:1	7	6,414:1	7	5,817:1
Unknown	5		5		2	
STATE TOTAL	319	10,321:1	324	10,547:1	335	9,974:1

REFERENCES

1. LAW REGULATING THE PRACTICE OF CHIROPRACTIC, Revised 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. BULLETIN OF THE CLEVELAND CHIROPRACTIC COLLEGE, 3511 West Olympia Boulevard, Los Angeles, CA 90019 (NB. Publication not dated)

3. BULLETIN OF LOS ANGELES COLLEGE OF CHIROPRACTIC. Academic Year 1969-71. Vol. 54, No. 1., 920 East Broadway, Glendale, CA 91209

4. CHIROPRACTORS LICENSED IN WASHINGTON, June 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCE

HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

DENTAL HYGIENIST

Licensing Regulations

The following legal description of dental hygienists is a summary from the law regulating the practice of dental hygiene in Washington State.(1)

Scope of Licensee's Functions

Any person licensed as a dental hygienist in this state may remove deposits and stains from the surfaces of the teeth and may apply topical preventative or prophylactic agents, and may polish and smooth restorations but shall not perform any other operation on the teeth or mouth or upon diseased tissues of the oral cavity.

Such licensed dental hygienists may operate only under the direct supervision of a licensed dentist, and under such supervision may be employed by hospitals, boards of education of public or private schools, county boards, board of health, or public or charitable institutions, or in dental offices provided that the number of hygienists so employed in any dental office shall not exceed in number the licensed dentists practicing therein.

Educational Prerequisites

Any citizen of this state of good moral character who shall have attained the age of nineteen years may file his application for license as a dental hygienist in the manner provided by law on forms furnished by the director of motor vehicles and shall submit with said application proof of said applicant's graduation from a training school for dental hygienists.

Examination of applicant shall consist of written and practical tests and shall include the subjects of inorganic chemistry, physiology, anatomy, bacteriology, anesthesia, radiography, materia medica, dental histology, principles of nursing and hygiene, practical demonstration in hygiene, other kindred subjects contained in the curriculum of training schools for dental hygienists.

Reciprocity

Applicants licensed as dental hygienists under the laws of other states whose requirements are equal to those of this state and who have been engaged in the lawful practice of dental hygiene for a period of not less than three years in such state may be granted licenses as dental hygienists in this state without examination: Provided, however, that the privileges of this section shall be extended only to those states which extend to this state the same privilege.

PROFESSIONAL FUNCTIONS

The following definition is a direct quote from Health Resources Statistics, 1969, p. 60.(2) It is reproduced here because it seems to be an informative summary of the professional functions as a whole.

> Dental Hygienists are the only dental auxiliaries who provide service directly to the patient, and who, like dentists, are required in each state to obtain a license to practice. The hygienist, working under the direction of a dentist, performs prophylaxes (scaling and polishing of teeth), exposes and processes dental x-ray films, and applies fluoride solution to children's teeth. As an educator, she instructs individual patients in toothbrushing techniques and proper diet related to the teeth, and performs other duties in conformity with her training and licensing.

THE HEALTH MANPOWER PROJECT SURVEY

A survey was conducted at the time of 1969 licensure renewal. An additional survey followed in 1970, but the data cannot be included in this publication because processing has not been completed. The professional association of dental hygienists which includes several members of the faculty, School of Dental Hygiene, University of Washington, assisted generously in the formulation of the questions. The following is the abstract of the report(3) based on the 1969 survey data.

This survey, which included all dental hygienists renewing their licenses as of September, 1969, (583) had an 88% response rate. About half (58%) of the respondents lived in Washington at the time of the survey; other major states of residence were Oregon and California. Eighty-five percent of the Washington residents lived in the four most populous counties. Three-fourths were employed. A wide range in the number of hours worked per week was observed. The majority worked under

33 hours per week. One-half were employed in one, a third in two or more private dental offices. Eighty percent specified oral prophylaxis as their major work function although a variety of clinical tasks were reported.

The dental hygienists constituted a young occupational group with a majority under the age of 35. Half of the respondents had earned a baccalaureate degree. Differences among the respondents' employment status and participation in continuing education were found on the basis of age.

Data from a study conducted in 1966 of Washington's dental hygienists(4) was examined which verified findings of the 1969 Project study. Employment and demographic characteristics of the occupational group were similar in 1969 to those found in 1966. In addition the 1966 study investigated income and reasons for professional inactivity. Income data from the 1966 study indicated that nearly all full-time dental hygienists (87%) then reported incomes of over $5,000. Of the inactive respondents, only 21% could specify their intention to return to work and the time of return.

The following table and figure include information on the 1969 survey. Active participation in the labor force at the time of the survey is reflected in the data.

Table 3 Dental Hygienists Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
NORTH COAST	1	1	100%	0	0	44,742:1
Clallam	1	1	100%	0	0	34,510:1
Jefferson	0	0	0	0	0	10,232:0
SOUTH COAST	2	0	0	2	0	74,858:0
Grays Harbor	2	0	0	2	0	59,550:0
Pacific	0	0	0	0	0	15,308:0
NORTH PUGET SOUND	7	5	71%	2	0	32,393:1
Island	0	0	0	0	0	25,900:0
San Juan	0	0	0	0	0	3,542:0
Skagit	4	4	100%	0	0	12,787:1
Whatcom	3	1	33%	2	0	81,377:1
CENTRAL PUGET SOUND	233	179	77%	47	7	10,607:1
King	200	152	76%	41	7	7,461:1
Kitsap	5	4	80%	1	0	24,303:1
Pierce	17	13	76%	4	0	31,172:1
Snohomish	11	10	90%	1	0	26,215:1
SOUTH PUGET SOUND	3	3	100%	0	0	46,610:1
Lewis	0	0	0	0	0	44,485:0
Mason	1	1	100%	0	0	19,975:1
Thurston	2	2	100%	0	0	37,684:1
LOWER COLUMBIA	14	12	86%	1	1	12,012:1
Clark	14	12	86%	1	1	10,537:1
Klickitat	0	0	0	0	0	11,959:0
Skamania	0	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	3	2	67%	0	1	35,896:1
Cowlitz	3	2	67%	0	1	34,225:1
Wahkiakum	0	0	0	0	0	3,343:0
UPPER COLUMBIA	1	1	100%	0	0	39,222:1
Chelan	1	1	100%	0	0	39,222:1
Douglas	0	0	0	0	0	16,227:0
Okanogan	0	0	0	0	0	24,758:0

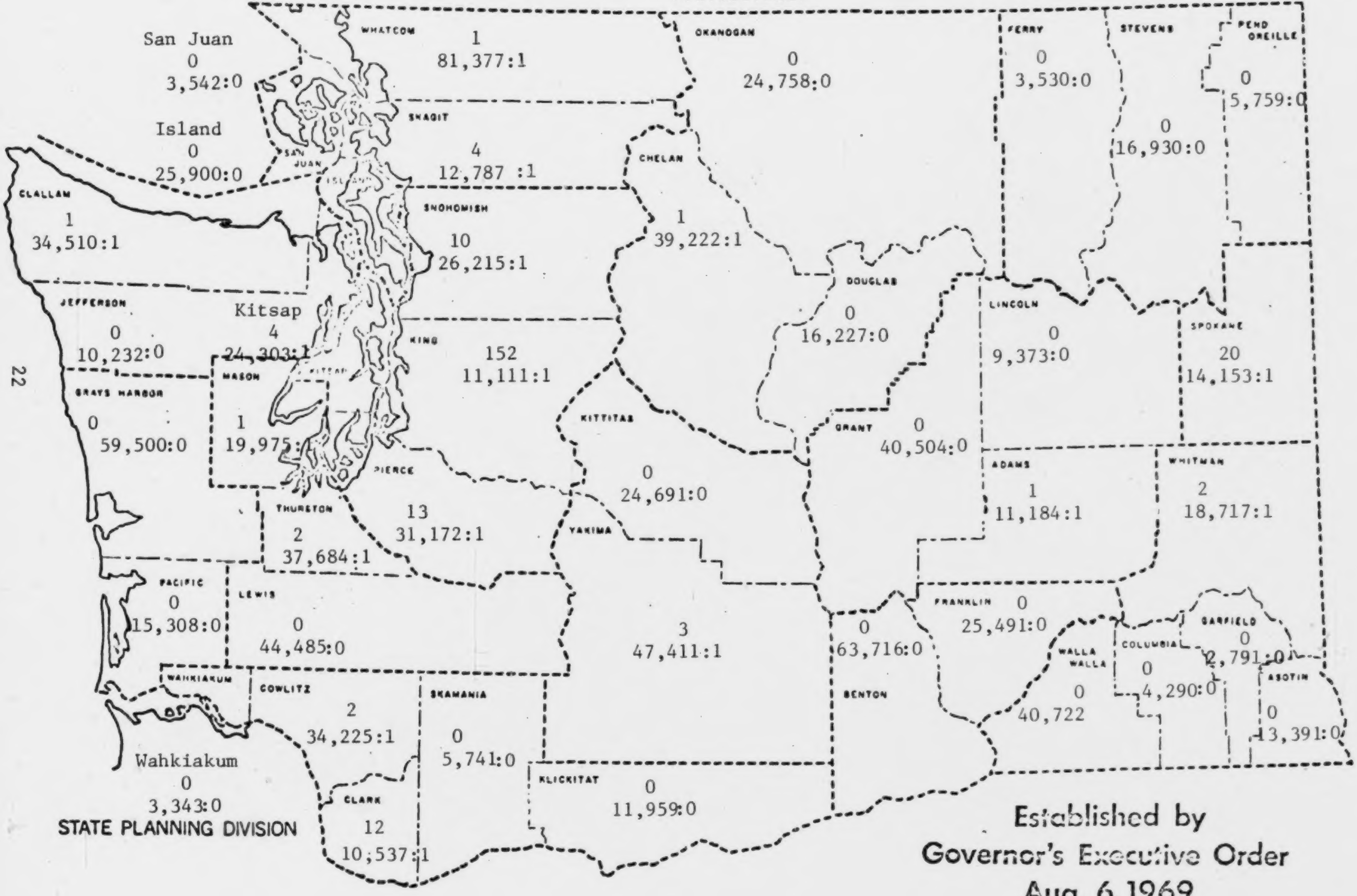
Table 3 Dental Hygienists (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
YAKIMA VALLEY	3	3	100%	0	0	55,642:1
Kittitas	0	0	0	0	0	24,691:0
Yakima	3	3	100%	0	0	47,411:1
COLUMBIA BASIN	1	1	100%	0	0	61,061:1
Adams	1	1	100%	0	0	11,184:1
Grant	0	0	0	0	0	40,504:0
Lincoln	0	0	0	0	0	9,373:0
FOUR RIVERS	2	0	0	2	0	89,207:0
Benton	2	0	0	2	0	63,716:0
Franklin	0	0	0	0	0	25,491:0
NORTH EAST	0	0	0	0	0	26,219:0
Ferry	0	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	0	5,759:0
Stevens	0	0	0	0	0	16,930:0
SPOKANE	23	20	87%	3	0	14,153:1
Spokane	23	20	87%	3	0	14,153:1
SOUTH EAST	2	2	100%	0	0	26,809:1
Asotin	0	0	0	0	0	13,391:0
Garfield	0	0	0	0	0	2,791:0
Whitman	2	2	100%	0	0	18,717:1
BLUE MOUNTAIN	0	0	0	0	0	45,012:0
Columbia	0	0	0	0	0	4,290:0
Walla Walla	0	0	0	0	0	40,722:0
STATE TOTAL	296	229	77%	58	9	14,591:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 2 Distribution by County of Dental Hygienists Currently Active and Residing in Washington State by Number and Ratio of Population Per Active Professional


San Juan
0
3,542:0
Island
0
25,900:0
CLALLAM
1
34,510:1
JEFFERSON
0
10,232:0
Kitsap
4
24,303:1
GRAYS HARBOR
0
59,500:0
MASON
1
19,975:1
PACIFIC
0
15,308:0
WAHKIAKUM
Wahkiakum
0
3,343:0
WHATCOM
1
81,377:1
SKAGIT
4
12,787 :1
SAN JUAN
ISLAND
SNOHOMISH
10
26,215:1
KING
152
11,111:1
KITSAP
PIERCE
13
31,172:1
THURSTON
2
37,684:1
LEWIS
0
44,485:0
COWLITZ
2
34,225:1
CLARK
12
10,537:1
SKAMANIA
0
5,741:0
OKANOGAN
0
24,758:0
CHELAN
1
39,222:1
KITTITAS
0
24,691:0
YAKIMA
3
47,411:1
KLICKITAT
0
11,959:0
DOUGLAS
0
16,227:0
GRANT
0
40,504:0
BENTON
0
63,716:0
FERRY
0
3,530:0
STEVENS
0
16,930:0
PEND OREILLE
0
5,759:0
LINCOLN
0
9,373:0
SPOKANE
20
14,153:1
ADAMS
1
11,184:1
WHITMAN
2
18,717:1
FRANKLIN
0
25,491:0
WALLA WALLA
0
40,722
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
0
13,391:0

STATE PLANNING DIVISION

Established by
Governor's Executive Order
Aug. 6, 1969

Licensing Information

Data collected by the Division of Professional Licensing, independent of any Health Manpower Project survey, show the geographic distribution of dental hygienists holding active licenses but not necessarily participating in the labor force. It can be seen in the table that no dental hygienist holding an active licensing status resided in the following counties at time of the 1970 licensure: Clallam, Island, San Juan, Skamania, Douglas, Okanogan, Grant, Ferry, Pend Oreille, Stevens, Asotin, Garfield, Columbia, and Walla Walla.

Table 4 Information on Dental Hygienists Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	1	42,460:1	1	44,000:1	1	44,742:1
Clallam	0	32,780:0	0	33,500:0	0	34,510:0
Jefferson	1	9,680:1	1	10,500:1	1	10,232:1
SOUTH COAST	4	19,018:1	5	15,820:1	8	9,357:1
Grays Harbor	3	20,073:1	4	15,625:1	7	8,507:1
Pacific	1	15,853:1	1	16,600:1	1	15,308:1
NORTH PUGET SOUND	7	23,257:1	10	17,070:1	11	14,724:1
Island	1	24,044:1	1	24,700:1	0	25,900:0
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	2	27,001:1	3	18,333:1	3	17,049:1
Whatcom	4	20,448:1	6	14,600:1	8	10,172:1
CENTRAL PUGET SOUND	265	6,797:1	266	7,048:1	299	6,350:1
King	224	4,845:1	224	4,997:1	252	4,501:1
Kitsap	5	19,271:1	6	17,133:1	6	16,202:1
Pierce	26	14,880:1	24	16,396:1	28	14,473:1
Snohomish	10	23,266:1	12	21,600:1	13	20,165:1
SOUTH PUGET SOUND	7	18,956:1	6	24,067:1	8	17,479:1
Lewis	1	47,969:1	1	48,500:1	1	44,485:1
Mason	1	18,287:1	1	20,700:1	1	19,975:1
Thurston	5	13,341:1	4	18,800:1	6	12,561:1
LOWER COLUMBIA	8	17,054:1	9	16,878:1	9	16,016:1
Clark	7	16,688:1	8	16,488:1	8	15,806:1
Klickitat	1	13,636:1	1	13,300:1	1	11,959:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0

Table 4 Dental Hygienists (continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
COWLITZ-WAHKIAKUM	4	18,230:1	4	19,325:1	4	17,948:1
Cowlitz	4	17,288:1	3	24,367:1	3	22,817:1
Wahkiakum	0	3,771:0	1	4,200:1	1	3,343:1
UPPER COLUMBIA	4	21,844:1	5	17,960:1	6	13,368:1
Chelan	4	10,723:1	5	8,660:1	6	6,537:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	0	27,601:0	0	27,500:0	0	24,758:0
YAKIMA VALLEY	8	22,888:1	10	18,530:1	10	16,693:1
Kittitas	1	22,949:1	1	25,300:1	1	24,691:1
Yakima	7	22,880:1	9	17,778:1	9	15,804:1
COLUMBIA BASIN	2	32,899:1	2	33,165:1	3	20,356:1
Adams	0	11,791:0	0	12,000:0	0	11,184:0
Grant	1	43,381:1	0	44,130:0	0	40,504:0
Lincoln	1	10,626:1	2	5,100:1	2	4,687:1
FOUR RIVERS	3	33,025:1	3	33,500:1	4	22,302:1
Benton	2	35,795:1	2	36,400:1	3	21,239:1
Franklin	1	27,485:1	1	27,700:1	1	25,491:1
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	26	11,538:1	30	10,000:1	34	8,326:1
Spokane	26	11,538:1	30	10,000:1	34	8,326:1
SOUTH EAST	6	8,867:1	5	10,980:1	5	10,723:1
Asotin	1	14,435:1	0	14,800:0	0	13,391:0
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	5	7,093:1	5	7,280:1	5	7,487:1
BLUE MOUNTAIN	2	25,305:1	0	49,900:0	0	45,012:0
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	2	22,803:1	0	44,900:0	0	40,722:0
Unknown	24		13		0	
STATE TOTAL	371	8,874:1	369	9,261:1	402	8,312:1

REFERENCES

1. LAWS RELATING TO DENTAL HYGIENE, Revised 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Pp. 60-61

3. DENTAL HYGIENISTS LICENSED IN WASHINGTON, May 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

4. DENTAL HYGIENISTS LICENSED IN WASHINGTON, 1966. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

5. HANDBOOK OF STATISTICS, May 1970. U.S. Department of Health, Education and Welfare, National Institutes of Health, Division of Dental Health, 9000 Rockville Pike, Bethesda, MD 20014

ADDITIONAL REFERENCES

COLLEGE WOMEN SEVEN YEARS AFTER GRADUATION, 1966. U.S. Department of Labor, Women's Bureau Bulletin 292, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

HEALTH MANPOWER SOURCE BOOK, Allied Health Manpower, 1950-80, Section 21. U.S. Public Health Service Publication 263, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

QUICK REFERENCE CHART TO HEALTH CAREERS IN WASHINGTON. 1970 Woman's Auxiliary to the Washington State Medical Association, 444 N.E. Ravenna Boulevard, Seattle, WA 98115

REQUIREMENTS AND REGISTRATION DATA: Dental Hygiene, State Examining Boards, 1969. American Dental Association, Division of Educational Measurements, Council on Dental Education, 211 East Chicago Avenue, Chicago, IL 60611

DENTISTS

Licensing Regulations

The following legal description of dentists is a summary from the law regulating the practice of dentistry in Washington State.(1)

Scope of Licensee's Functions

A person practices dentistry who

1. presents himself as being able to diagnose, treat, remove stains and concretions from teeth, operate or prescribe for any disease, pain, injury, deficiency, deformity, or physical condition of the human teeth, alveolar process, gums, or jaws; or

2. offers or undertakes by any means or methods to diagnose, treat, remove stains or concretions from teeth, operate or prescribe for any disease, pain, injury, deficiency, deformity, or physical condition of the same, or take impressions of the teeth or jaw; or

3. owns, maintains or operates an office for the practice of dentistry; or

4. engages in any of the practices included in the curricula of recognized and approved dental schools or colleges; or

5. professes to the public by any method to furnish, supply, construct, reproduce, or repair any prosthetic denture, bridge, appliance, or other structure to be worn in the human mouth.

X-ray diagnosis as to the method of dental practice in which the diagnosis and examination is made of the normal and abnormal structures, parts or functions of the human teeth, the alveolar process, maxilla, mandible or soft tissues adjacent thereto, is hereby declared to be the practice of dentistry. Any person other than a regularly licensed physician or surgeon who makes any diagnosis or interpretation or explanation, or attempts to diagnose or to make any interpretation or explanation of the registered shadow or shadows of any part of the human teeth, alveolar process, maxilla, mandible or soft tissues adjacent thereto by the use of X-ray is declared to be engaged in the practice of dentistry, medicine or surgery.

Educational Prerequisites

1. Be a graduate or have fifteen units of high school work in acceptable subjects from a high or other secondary school approved by the board of dental examiners.

2. Present satisfactory evidence of completion of pre-dental and dental education under one of the following plans:

   (a) Completion of a minimum of thirty semester hours of collegiate credit in acceptable subjects from a college or university approved by the board of dental examiners, and graduation from a dental college, school, or dental department of an institution requiring four courses of instruction of at least eight months each, approved by the board, or

   (b) Completion of a minimum of sixty semester hours of collegiate credit in acceptable subjects from a college or university approved by the board of dental examiners, and graduation from a dental school, college, or dental department of an institution requiring three courses of at least eight months each, approved by the board.

3. Pass an examination given by the board of dental examiners in the theory and practice of the science of dentistry.

Reciprocity

There is no provision for reciprocity of licensures with other states included in Washington law.

PROFESSIONAL FUNCTIONS

The following description of the profession of dentistry is taken from'Health Resources Statistics,"1969, pp. 63-64.(2) Generous consultation was given by the officers of the professional association in deriving this discussion of the dentist's role and responsibilities.

Dentistry is that branch of the health professions responsible for maintaining and improving the health of the teeth and related structures. Early diagnosis and treatment of tooth decay, periodontal disease, malocclusion, and other oral disorders make possible proper mastication of food, and contribute toward normal speech and facial appearance. Prompt detection of oral cancer and other systemic conditions which manifest themselves in the mouth is necessary for the maintenance of general health.

Modern dentistry places great emphasis upon the prevention and control of dental disease, through such measures as the early detection and correction of diseases of the teeth and supporting structures, fluoridation, and dental health education. Educational programs conducted by dental health professionals stress the importance of proper diet, correct oral hygiene practices, and the importance of regular dental examinations. Dental research, both basic and applied, is another increasingly important component of professional activity.

Almost all dentists provide care to patients, primarily in private dental offices, but also in public and private clinics and hospitals, military installations and other institutions. Diagnosis and treatment of existing oral diseases and abnormalities may involve filling decayed teeth, treatment of soft and hard tissues surrounding teeth, extraction of teeth. Dentists may also provide preventive services including topical application of fluorides, scaling and polishing of teeth, and adjustment of occlusions.

Some professionally active dentists are primarily engaged in nonclinical activities, such as teaching, research, or administration of dental programs. These dentists are employed by dental schools, public health departments, dental societies, and various other public and private organizations. A number of dentists in private practice also devote a part of their professional time to teaching and research and to voluntary community services, such as examination of school children's teeth.

STATISTICAL INFORMATION ON DENTISTS IN THE STATE OF WASHINGTON

No survey was conducted by the Health Manpower Project because of available information based on a study conducted by the American Dental Association in 1968.(3) This survey utilized a stratified sample design and had a response rate of 27%. Distribution, work characteristics and income were among the items discussed in the publication.

The following table is based on licensing information. This point is relevant since many of the statistical tables included in this publication present survey data in addition to licensing information. It can be noticed in the table that at the time of the 1970 licensure renewal, Ferry County was the only county without a dentist holding an active license within its boundaries. In 1968 Jefferson County was without dentists, but the following year four such health professionals were licensed.

Licensure and residency in a county does not necessarily reflect professional activity, but can be considered only as an overall index of geographic distribution of a specified health profession.

Table 5 Information on Dentistry Derived from Figures Gathered by the Division of Professional Licensing at the time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	20	2,123:1	22	2,000:1	21	2,131:1
Clallam	20	1,639:1	18	1,861:1	17	2,030:1
Jefferson	0	9,680:0	4	2,625:1	4	2,558:1
SOUTH COAST	32	2,377:1	33	2,397:1	33	2,268:1
Grays Harbor	26	2,316:1	27	2,315:1	27	1.500:1
Pacific	6	2,610:1	6	2,767:1	6	2,551:1
NORTH PUGET SOUND	88	1,850:1	91	1,876:1	88	1,841:1
Island	12	2,004:1	13	1,900:1	12	2,158:1
San Juan	1	2,961:1	2	1,700:1	2	1,771:1
Skagit	28	1,929:1	28	1,964:1	29	1,764:1
Whatcom	47	1,740:1	48	1,825:1	45	1,808:1
CENTRAL PUGET SOUND	1,257	1,433:1	1,324	1,416:1	1,340	1,417:1
King	899	1,207:1	966	1,159:1	968	1,172:1
Kitsap	53	1,818:1	43	2,391:1	46	2,113:1
Pierce	198	1,954:1	195	2,018:1	208	1,948:1
Snohomish	107	2,174:1	120	2,410:1	118	2,222:1
SOUTH PUGET SOUND	74	1,793:1	77	1,875:1	74	1,890:1
Lewis	19	2,510:1	22	2,046:1	22	2,022:1
Mason	12	1,524:1	12	1,725:1	12	1,665:1
Thurston	43	1,551:1	43	1,749:1	40	1,884:1
LOWER COLUMBIA	59	2,312:1	64	2,373:1	70	2,059:1
Clark	53	2,204:1	59	2,236:1	65	1,945:1
Klickitat	5	2,727:1	4	3,325:1	4	2,990:1
Skamania	1	5,982:1	1	6,700:1	1	5,741:1
COWLITZ-WAHKIAKUM	28	2,604:1	27	2,863:1	28	2,671:1
Cowlitz	27	2,561:1	26	2,811:1	27	2,535:1
Wahkiakum	1	3,771:1	1	4,200:1	1	3,343:1
UPPER COLUMBIA	46	1,899:1	50	1,796:1	51	1,573:1
Chelan	30	1,430:1	31	1,397:1	30	1,307:1
Douglas	3	5,628:1	6	3,167:1	8	2,028:1
Okanogan	13	2,123:1	13	2,115:1	13	1,904:1

Table 5 Dentistry (Continuted)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	87	2,105:1	79	2,346:1	80	2,087:1
Kittitas	11	1,086:1	9	2,811:1	9	2,743:1
Yakima	76	2,107:1	70	2,286:1	71	2,003:1
COLUMBIA BASIN	23	2,861:1	30	2,211:1	29	2,106:1
Adams	5	2,358:1	7	1,714:1	7	1,598:1
Grant	14	3,099:1	19	2,323:1	18	2,250:1
Lincoln	4	2,657:1	4	2,550:1	4	2,343:1
FOUR RIVERS	43	2,305:1	40	2,153:1	36	2,478:1
Benton	32	2,237:1	29	2,510:1	28	2,276:1
Franklin	11	2,499:1	11	2,518:1	8	3,186:1
NORTH EAST	7	4,102:1	5	5,680:1	6	4,370:1
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	2	3,601:1	2	3,250:1	2	2,880:1
Stevens	5	3,523:1	3	6,100:1	4	4,233:1
SPOKANE	201	1,492:1	198	1,515:1	205	1,381:1
Spokane	201	1,492:1	198	1,515:1	205	1,381:1
SOUTH EAST	27	1,970:1	24	2,288:1	25	2,145:1
Asotin	4	3,609:1	4	3,700:1	4	3,348:1
Garfield	2	1,652:1	2	1,850:1	2	1,396:1
Whitman	21	1,689:1	18	2,022:1	19	1,970:1
BLUE MOUNTAIN	32	1,582:1	31	1,610:1	31	1,452:1
Columbia	2	2,503:1	2	2,500:1	2	2,145:1
Walla Walla	30	1,520:1	29	1,548:1	29	1,404:1
Unknown	74		45		0	
STATE TOTAL	2,098	1,569:1	2,140	1,597:1	2,117	1,578:1

REFERENCES

1. LAW RELATING TO DENTISTRY, Revised 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. HEALTH RESOURCES STATISTICS, 1969. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

3. THE 1968 SURVEY OF DENTAL PRACTICE. Bureau of Economic Research and Statistics, American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611

ADDITIONAL REFERENCES

DISTRIBUTION OF DENTISTS IN THE UNITED STATES BY STATE, REGION, DISTRICT and COUNTY, 1969, and FACTS ABOUT STATES FOR THE DENTIST SEEKING A LOCATION, 1969. American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611

HEALTH MANPOWER SOURCE BOOK, Allied Health Manpower, 1950-80, Section 21. U.S. Public Health Service Publication 263, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

NATIONAL SURVEY OF LICENSED DENTISTS IN THE UNITED STATES. Report in preparation for publication, U.S. Department of Health, Education and Welfare, National Institutes of Health, Division of Dental Health, 9000 Rockville Pike, Bethesda, MD 20014

DIETITIANS AND NUTRITIONISTS

The following discussion of the role and responsibilities of dietitians and nutritionists was derived from the Health Resources Statistics, 1968 handbook[1] and from correspondence with Miss June Stein, Nutrition Consultant with the Washington State Division of Health.

Dietetic and nutritional professionals deal with the application of the scientific principles of nutrition to the feeding of individuals and groups. Dietitians assume major responsibility for food selection, preparation and management of food services. Nutritionists engage in investigating and solving problems of nutrition for the promotion of health.

Administrative dietitians apply the principles of nutrition and sound management to large-scale meal planning and preparation such as that done in hospitals, universities, schools and other institutions. Therapeutic dietitians plan and supervise the preparation of special meals for patients on modified diets and teach patients. Some dietitians, particularly those in hospitals affiliated with medical centers, teach dietetic, medical, dental and nursing students such subjects as dietetics, foods and nutrition and diet therapy. Some members of the profession, called public health nutritionists, conduct studies or survey, plan and develop programs in food especially dealing with nutritional needs of particular groups such as the aging, children, prenatal patients, persons with chronic diseases and poverty groups.

Minimal educational requirements for dietitians is a bachelor's degree with a major in food and nutrition or institution management. Undergraduate work should include courses in foods and nutrition, bacteriology, physiology and related courses such as mathematics, psychology, and economics. To qualify for professional recognition, the American Dietetic Association recommends completion of a one-year dietetic internship program approved by the Association or three years of prior approved, pre-planned experience. An important part of the internship is learning within the work setting. Most approved internship programs are located in hospitals. However, more opportunities for an undergraduate coordinated program in medical dietetics or food service administration are available as well as a combination of the internship with a Master's Degree Program.

THE HEALTH MANPOWER PROJECT SURVEY

A survey was conducted during spring, 1970[2]. Since dietitians and nutritionists are not licensed in the State of Washington, the co-sponsorship of the survey with the Washington State Dietetic Association was particularly important to identify and successfully contact professionals in this field.

Six hundred fifty two questionnaires were mailed and 560 returned, which represents a response rate of 86%.

The focus of the following brief summary is on employment status and geographic location of the respondents. The complete report will include numerous details such as actual participation and opinions concerning continuing education.

> Respondents were living primarily in the most populous counties with 51% in King County proper. According to the data, no dietitians or nutritionists lived in eight counties. A majority were employed in the field of their training. Five percent (26 professionals) were unemployed and seeking work, 21% were unemployed and not seeking work. "Dietitian" was the most frequently reported occupational title with only 4% specifying "nutritionist". The most frequently reported work settings were hospitals (52%) and public health agencies or department (12%). Respondents were engaged in a wide range of major responsibilities: 23% reported clinical and therapeutic nutrition, 14% management activities, and another 15% consultation. A majority of the employed respondents were working full-time. A third of the respondents were under the age of 35 and half between the ages of 35 and 54. Highest educational attainment was usually a baccalaureate degree (81%) and advanced degrees were most frequently at the master's level. Food and nutrition, and management were the most commonly reported areas of advanced study.

The following table and figure are based on information gathered at the time of the survey. It should be kept in mind that the profession is not licensed and therefore neither a legal description nor other licensing information can be supplied.

Table 6 Dietitians and Nutritionists Residing In Washington State by Participation In the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
NORTH COAST	5	3	60%	2	0	14,914:1
Clallam	5	3	60%	2	0	11,503:1
Jefferson	0	0	0	0	0	10,232:0
SOUTH COAST	4	1	25%	2	1	74,858:1
Grays Harbor	2	1	50%	1	0	59,550:1
Pacific	2	0	0	1	1	15,308:0
NORTH PUGET SOUND	15	8	53%	5	2	20,246:1
Island	3	0	0	2	1	25,900:0
San Juan	1	0	0	1	0	3,542:0
Skagit	3	2	66%	0	1	25,573:1
Whatcom	8	6	75%	2	0	13,563:1
CENTRAL PUGET SOUND	368	230	63%	120	18	8,255:1
King	273	173	63%	87	13	6,556:1
Kitsap	11	5	45%	6	0	19,442:1
Pierce	61	38	62%	20	3	10,664:1
Snohomish	23	14	61%	7	2	18,725:1
SOUTH PUGET SOUND	24	17	71%	5	2	8,225:1
Lewis	3	2	67%	1	0	22,242:1
Mason	1	1	100%	0	0	19,975:1
Thurston	20	14	70%	4	2	5,384:1
LOWER COLUMBIA	17	9	53%	8	0	16,016:1
Clark	15	8	53%	7	0	15,806:1
Klickitat	0	0	0	0	0	11,959:0
Skamania	2	1	50%	1	0	5,741:1
COWLITZ-WAHKIAKUM	3	2	66%	1	0	35,896:1
Cowlitz	3	2	66%	1	0	34,225:1
Wahkiakum	0	0	0	0	0	3,343:0
UPPER COLUMBIA	8	7	87%	1	0	11,458:1
Chelan	5	4	80%	1	0	9,805:1
Douglas	2	2	100%	0	0	8,114:1
Okanogan	1	1	100%	0	0	24,758:1

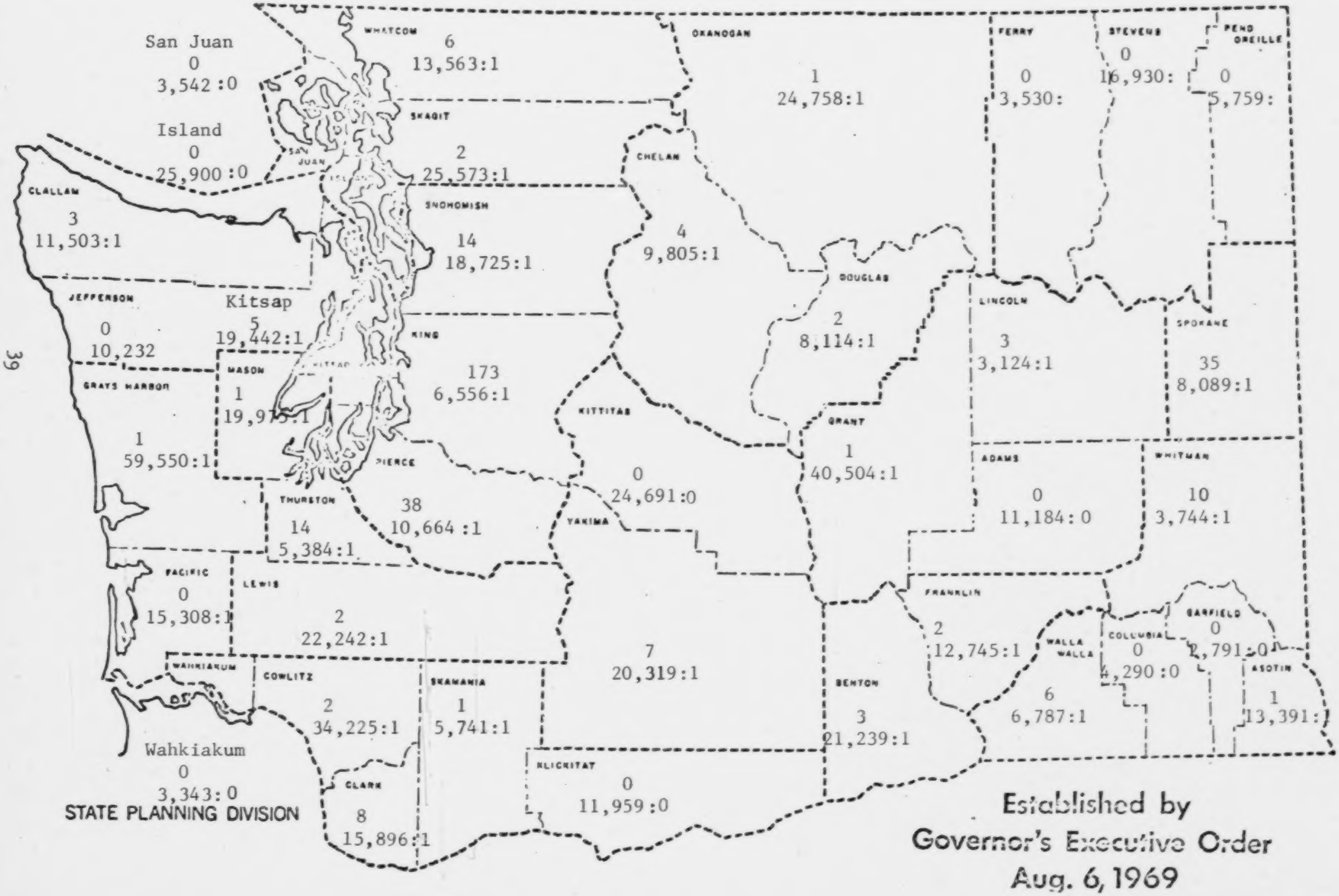
Table 6 Dietitians and Nutritionists (Continued

Planning Region and County	Number Residing	Professionally			Active In Another Occupation	Ratio of Persons Per Active Professional
		Active Number	%	Inactive		
YAKIMA VALLEY	12	7	58%	4	1	23,847:1
Kittitas	0	0	0	0	0	24,691:0
Yakima	12	7	58%	4	1	20,319:1
COLUMBIA BASIN	4	4	100%	0	0	15,265:1
Adams	0	0	0	0	0	11,184:0
Grant	1	1	100%	0	0	40,504:1
Lincoln	3	3	100%	0	0	3,124:1
FOUR RIVERS	9	5	55%	2	2	17,841:1
Benton	6	3	50%	2	1	21,239:1
Franklin	3	2	67%	0	1	12,745:1
NORTH EAST	1	0	0	1	0	26,219:0
Ferry	1	0	0	1	0	3,530:0
Pend Oreille	0	0	0	0	0	5,759:0
Stevens	0	0	0	0	0	16,930:0
SPOKANE	42	35	83%	7	0	8,089:1
Spokane	42	35	83%	7	0	8,089:1
SOUTH EAST	14	11	79%	2	1	4,874:1
Asotin	1	1	100%	0	0	13,391:1
Garfield	1	0	0	1	0	2,791:0
Whitman	12	10	83%	1	1	3,744:1
BLUE MOUNTAIN	7	6	86%	1	0	7,502:1
Columbia	0	0	0	0	0	4,290:0
Walla Walla	7	6	86%	1	0	6,787:1
STATE TOTAL	534	345	65%	161	26	9,685:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introduction chapter for explanation of state totals.

Figure 3 Distribution by County of Dietitians and Nutritionists Currently Active and Residing in Washington State by Number and Ratio of Population Per Active Professional


San Juan
0
3,542:0
Island
0
25,900:0
WHATCOM
6
13,563:1
SKAGIT
2
25,573:1
SAN JUAN
OKANOGAN
1
24,758:1
FERRY
0
3,530:
STEVENS
0
16,930:
PEND OREILLE
0
5,759:
CLALLAM
3
11,503:1
SNOHOMISH
14
18,725:1
CHELAN
4
9,805:1
DOUGLAS
2
8,114:1
LINCOLN
3
3,124:1
SPOKANE
35
8,089:1
JEFFERSON
0
10,232
Kitsap
5
19,442:1
KING
173
6,556:1
MASON
1
19,975:1
GRAYS HARBOR
1
59,550:1
KITTITAS
0
24,691:0
GRANT
1
40,504:1
ADAMS
0
11,184:0
WHITMAN
10
3,744:1
PIERCE
38
10,664:1
THURSTON
14
5,384:1
YAKIMA
7
20,319:1
PACIFIC
0
15,308:1
LEWIS
2
22,242:1
FRANKLIN
2
12,745:1
WALLA WALLA
6
6,787:1
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
1
13,391:1
WAHKIAKUM
COWLITZ
2
34,225:1
SKAMANIA
1
5,741:1
BENTON
3
21,239:1
KLICKITAT
0
11,959:0
Wahkiakum
0
3,343:0
CLARK
8
15,896:1
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

REFERENCES

1. HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Pp. 71-72

2. SURVEY OF ALL DIETITIANS AND NUTRITIONISTS LIVING IN WASHINGTON STATE IN EARLY 1970. Conducted by the Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCES

1. DIETETIC MANPOWER TRENDS IN EDUCATION AND TRAINING, September 1970. Journal of the American Dietetic Association, 57:225-228

2. EMPLOYMENT OUTLOOK FOR DIETITIANS; Occupational Outlook Report Series Number 115026, Department of Labor, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

3. NATIONWIDE SURVEY OF DIETETIC AND NUTRITIONIST MANPOWER, report in data processing stage. American Dietetic Association, 620 North Michigan Avenue, Chicago, IL 60611

4. THE AMERICAN DIETETIC ASSOCIATION, 620 North Michigan Avenue, Chicago, IL 60611

DISPENSING OPTICIANS

Licensing Regulations

The following legal description of dispensing opticians is a summary from the law regulating the practice of dispensing opticians in Washington State.(1)

Scope of Licensee's Functions

A dispensing optician is a person who prepares duplications of, or prepares and dispenses lenses, spectacles, eyeglasses and/or appurtenances thereto to the intended wearers thereof on written prescriptions from physicians or optometrists, and in accordance with such prescriptions, measures, adapts, adjusts and fabricates such lenses, spectacles, eyeglasses and/or appurtenances thereto to the human face for the aid or correction of visual or ocular anomalies of the human eye: Provided, however, that contact lenses may be fitted only upon a written prescription of a physician or optometrist.

Educational Prerequisites:

1. High school graduate, and

2. Has either
   (a) had at least three years of apprenticeship training; or
   (b) successfully completed a prescribed course in opticianry in a college or university approved by the director of licenses; or
   (c) been principally engaged in practicing as a dispensing optician not in the State of Washington for five years.

Reciprocity

There is no provision for reciprocity of licensure with other states included in Washington law.

PROFESSIONAL FUNCTIONS

A dispensing optician duplicates lenses or eyeglasses, or on written prescription from an ophthamologist or optometrist, fits the wearer with the prescribed optical need.(2) Contact lenses must be fitted only on written prescription by the physician or optometrist. An optician usually works in a retail dispensary or optical shop. He must have a basic knowledge of the physics of optics and the various refractive needs of the eye. Reasonable mechanical ability and hand dexterity are also required.

Since the optician works in a retail selling capacity, it is of advantage to enjoy working with people and to be able to communicate well. Neatness, courtesy and dependability are also assets in the dispensing optician's relationships with patients.

THE HEALTH MANPOWER PROJECT SURVEY

All dispensing opticians licensed in Washington as of May, 1970 were included in the survey. Of those who had renewed their licenses by October, 1970, 81% (181) responded to the survey.(3)

Of the respondents, 94% indicated their residence was in Washington. Residents were primarily located in populous counties with 42% in King County proper. No opticians reported residence in 21 counties.

Ninety percent of the dispensing opticians were actively practicing; about half were employed by an optical company. The remaining opticians were self-employed or employed by other optical professionals (i.e., ophthamologist). A majority were working between 40 and 49 hours per week. The most frequently reported work activities were fitting of glasses and checking completed work. A majority had graduated from high school as their highest formal educational attainment, and a majority also reported completing an apprenticeship in ophthalmic dispensing. Most (84%) apprenticeships had been completed in Washington State. Apprenticeships were usually completed under the guidance of another optician or a combination of optician and other optical professional. This training was most frequently of more than three years duration, and tended to occur after the age of 30.

The information in the following table and figure is based on the survey of the profession conducted by the Health Manpower Project. Concentration of dispensing opticians predominantly in urban areas graphically represented and depicted in figure 4.

Table 7 Dispensing Opticians Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	%	Inactive	Ratio of Persons Per Active Professional
NORTH COAST	0	0	0	0	44,742:0
Clallam	0	0	0	0	34,510:0
Jefferson	0	0	0	0	10,232:0
SOUTH COAST	2	1	50%	1	74,858:1
Grays Harbor	2	1	50%	1	59,550:1
Pacific	0	0	0	0	15,308:0
NORTH PUGET SOUND	7	7	100%	0	23,138:1
Island	0	0	0	0	25,900:0
San Juan	0	0	0	0	3,542:0
Skagit	3	3	100%	0	17,049:1
Whatcom	4	4	100%	0	20,344:1
CENTRAL PUGET SOUND	119	110	92%	9	17,261:1
King	73	68	93%	5	16,679:1
Kitsap	5	5	100%	0	19,442:1
Pierce	29	25	86%	4	16,209:1
Snohomish	12	12	100%	0	21,846:1
SOUTH PUGET SOUND	10	9	90%	1	15,537:1
Lewis	2	2	100%	0	22,242:1
Mason	1	1	100%	0	19,975:1
Thurston	7	6	86%	1	12,561:1
LOWER COLUMBIA	1	1	100%	0	144,146:1
Clark	1	1	100%	0	126,446:1
Klickitat	0	0	0	0	11,959:0
Skamania	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	0	0	0	0	71,793:0
Cowlitz	0	0	0	0	68,450:0
Wahkiakum	0	0	0	0	3,343:0
UPPER COLUMBIA	0	0	0	0	80,207:0
Chelan	0	0	0	0	39,222:0
Douglas	0	0	0	0	16,227:0
Okanogan	0	0	0	0	24,758:0

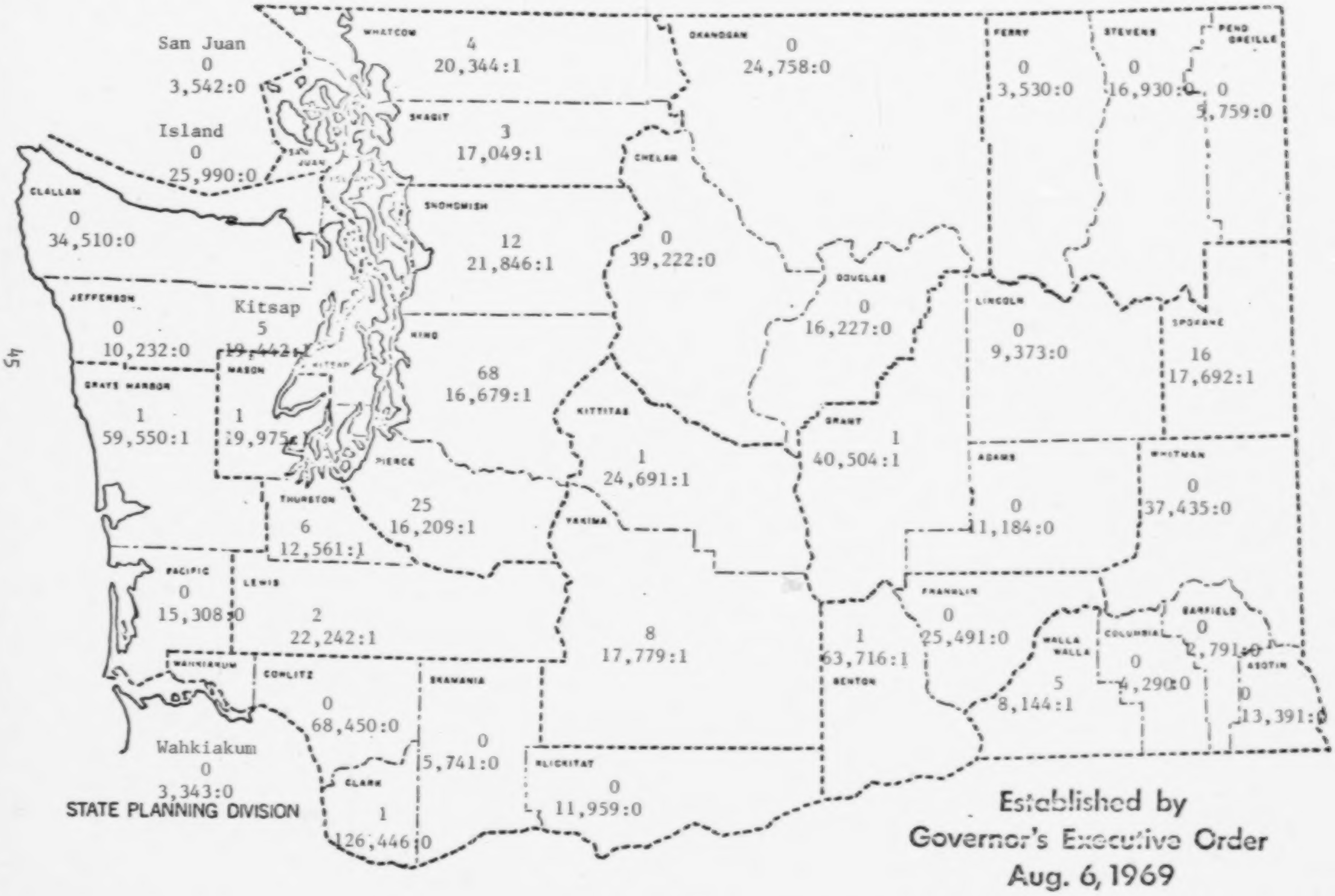
Table 7 Dispensing Opticians (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	9	9	100%	0	18,457:1
Kittitas	1	1	100%	0	24,691:1
Yakima	8	8	100%	0	17,779:1
COLUMBIA BASIN	1	1	100%	0	61,061:1
Adams	0	0	0	0	11,184:0
Grant	1	1	100%	0	40,504:1
Lincoln	0	0	0	0	9,373:0
FOUR RIVERS	1	1	100%	0	89,207:1
Benton	1	1	100%	0	63,716:1
Franklin	0	0	0	0	25,491:0
NORTH EAST	0	0	0	0	26,219:0
Ferry	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	5,759:0
Stevens	0	0	0	0	16,930:0
SPOKANE	16	16	100%	0	17,692:1
Spokane	16	16	100%	0	17,692:1
SOUTH EAST	0	0	0	0	53,617:0
Asotin	0	0	0	0	13,391:0
Garfield	0	0	0	0	2,791:0
Whitman	0	0	0	0	37,435:0
BLUE MOUNTAIN	5	5	100%	0	9,002:1
Columbia	0	0	0	0	4,290:0
Walla Walla	5	5	100%	0	8,144:1
STATE TOTAL	172	161	94%	11	20,754:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals

Figure 4 Distribution by County of Dispensing Opticians Currently Active and Residing in Washington State by Number and Ratio of Population Per Active Professional


San Juan
0
3,542:0
Island
0
25,990:0
CLALLAM
0
34,510:0
JEFFERSON
0
10,232:0
Kitsap
5
19,442:1
MASON
1
19,975:1
GRAYS HARBOR
1
59,550:1
PACIFIC
0
15,308:0
Wahkiakum
0
3,343:0
WAHKIAKUM
WHATCOM
4
20,344:1
SKAGIT
3
17,049:1
SAN JUAN
SNOHOMISH
12
21,846:1
KING
68
16,679:1
KITSAP
PIERCE
25
16,209:1
THURSTON
6
12,561:1
LEWIS
2
22,242:1
COWLITZ
0
68,450:0
CLARK
1
126,446:0
SKAMANIA
0
5,741:0
OKANOGAN
0
24,758:0
CHELAN
0
39,222:0
KITTITAS
1
24,691:1
YAKIMA
8
17,779:1
KLICKITAT
0
11,959:0
DOUGLAS
0
16,227:0
GRANT
1
40,504:1
BENTON
1
63,716:1
FERRY
0
3,530:0
STEVENS
0
16,930:0
PEND OREILLE
0
5,759:0
LINCOLN
0
9,373:0
SPOKANE
16
17,692:1
ADAMS
0
11,184:0
WHITMAN
0
37,435:0
FRANKLIN
0
25,491:0
WALLA WALLA
5
8,144:1
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
0
13,391:0
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

Licensing Information

The following tables are composed of data which are automatically gathered at time of annual licensure renewal. They included data on all dispensing opticians holding active licensure status. Such a status does not necessarily indicate active participation in the labor force.

Table 8 Information on Dispensing Opticians Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	1	42,460:1	1	44,000:1	1	44,742:1
Clallam	1	32,780:1	1	33,500:1	1	34,510:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	4	19,018:1	4	19,775:1	5	14,972:1
Grays Harbor	4	15,055:1	4	15,625:1	5	11,910:1
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	6	27,133:1	7	24,386:1	9	17,996:1
Island	0	24,044:0	0	24,700:0	0	25,900:0
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	1	54,001:1	2	27,500:1	3	17,049:1
Whatcom	5	16,358:1	5	17,520:1	6	13,563:1
CENTRAL PUGET SOUND	138	13,052:1	146	12,841:1	153	12,410:1
King	86	12,620:1	95	11,782:1	96	11,814:1
Kitsap	4	24,089:1	5	20,560:1	5	19,442:1
Pierce	34	11,379:1	33	11,924:1	35	11,578:1
Snohomish	14	16,619:1	13	19,939:1	17	15,421:1
SOUTH PUGET SOUND	9	14,743:1	9	16,044:1	11	12,712:1
Lewis	2	23,841:1	2	24,250:1	2	22,242:1
Mason	0	18,287:0	0	20,700:0	1	19,975:1
Thurston	7	9,530:1	7	10,743:1	8	9,421:1
LOWER COLUMBIA	1	136,443:1	1	151,900:1	2	72,073:1
Clark	1	116,815:1	1	131,900:1	2	63,223:1
Klickitat	0	13,636:0	0	13,300:0	0	11,959:0
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	0	72,921:0	0	77,300:0	0	71,793:0
Cowlitz	0	69,150:0	0	73,100:0	0	68,450:0
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0

Table 8 Dispensing Opticians (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	5	17,475:1	5	17,960:1	5	16,041:1
Chelan	4	10,723:1	4	10,825:1	4	9,806:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	1	27,601:1	1	27,500:1	1	24,758:1
YAKIMA VALLEY	11	16,646:1	12	15,442:1	14	11,923:1
Kittitas	1	22,949:1	2	12,650:1	3	8,230:1
Yakima	10	16,016:1	10	16,000:1	11	12,931:1
COLUMBIA BASIN	1	65,798:1	1	66,330:1	1	61,061:1
Adams	0	11,791:0	0	12,000:0	0	11,184:0
Grant	1	43,381:1	1	44,130:1	1	40,504:1
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	3	33,500:1	2	50,250:1	3	29,736:1
Benton	2	35,795:1	2	36,400:1	2	31,858:1
Franklin	1	27,485:1	0	27,700:0	0	25,491:0
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	18	16,665:1	18	16,667:1	19	14,899:1
Spokane	18	16,665:1	18	16,667:1	19	14,899:1
SOUTH EAST	1	53,202:1	1	54,900:1	1	53,617:1
Asotin	1	14,435:1	1	14,800:1	1	13,391:1
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	0	35,463:0	0	36,400:0	0	37,435:0
BLUE MOUNTAIN	5	10,122:1	5	9,980:1	5	9,002:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	5	9,121:1	5	8,980:1	5	8,144:1
Unknown	0		0		0	
STATE TOTAL	203	16,219:1	212	16,120:1	229	14,591:1

REFERENCES

1. AN ACT RELATING TO DISPENSING OPTICIANS, Revised 1967. Department of Motor Vehicles, Division of Professional Licensing, P. O. Box 649, Olympia, WA 98501

2. Adapted from an unpublished handbook on ophthalmic dispensing used in the preparation of a program for Associate Degree in Applied Science, Ophthalmic Dispensing, obtained from Mr. Ralph Hall, Overlake Optical Dispensary, Bellevue, WA 98004

3. SURVEY OF DISPENSING OPTICIANS LICENSED IN WASHINGTON, 1970. Health Manpower Project, Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCES

1. HEALTH MANPOWER SOURCE BOOK, Allied Health Manpower, 1950-80, Section 21. U.S. Public Health Service Publication 263, Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402

2. VISION MANPOWER IN THE UNITED STATES, September 1970. Journal of Public Health, Vol. 60. Number 9, Pp. 1760-68

DRUGLESS THERAPEUTICS (NATUROPATHS)

Licensing Regulations

The following legal description of a drugless therapeutic is a summary from the law regulating the practice of drugless therapeutics in Washington State (1).

Scope of Licensee's Functions

"Drugless therapeutics" consists of hydrotherapy, dietetics, electrotherapy, radiography, sanitation, suggestion, mechanical and manual manipulation for the stimulation of physiological and psychological action to establish a normal condition of mind and body, but in no way includes the giving, prescribing or recommending of pharmaceutic drugs and poisons for internal use.

The separate and coordinate systems of drugless therapeutics are:

(a) Food Science: the science of treating disease through the chemical action of foods, water, non-medicinal herbs, roots, barks, and all natural food elements, other than pharmaceutic drugs and poisons to bring about a normal condition of health.

(b) Mechano-Therapy: a system of therapeutics which enables the practitioners to know how to apply scientifically, the mechanics of hydro-therapy, dietetics, circumstances, idea and manual manipulation for the stimulation of psycho and physiological action to establish a normal condition of the body.

(c) Suggestive Therapeutics: a system of healing which enables the practitioner to know the scientific effect of movements on the body and how to direct a system of mechanical gymnastics that restore the diseased parts of functions to a normal condition.

(d) Physcultopathy: a system of healing which enables the practitioner to know the scientific effect of movements on the body and how to direct a system of mechanical gymnastics that restore the diseased parts or functions to a normal condition.

Educational Prerequisites

To be eligible for a license in drugless therapeutics, a person must prove that he has completed a residence course of three entire sessions of thirty-six weeks each at a chartered drugless school the entrance requirements of which were a high school education or its equivalent.

Drugless therapeutics practitioners must also pass an examination in the following subjects: anatomy, physiology, hygiene, symptomatology, urinalysis, dietetics, hydrotherapy, radiography, electrotherapy, gynecology, obstetrics, psychology, mechanical and manual manipulation.

Reciprocity

There is no reciprocity in the drugless therapeutics portion of the examination. Applicants for reciprocity in the basic science portion of the examination must forward a certificate from the secretary of the basic science board in the state in which the original basic science certificate was obtained. Such certificate must show subjects and grades.

PROFESSIONAL FUNCTIONS

The following direct quote from the literature provides additional insight into the profession of drugless therapeutics.

"Naturopathy is a school of healing employing a combination of nature's forces such as air, light, water, vibration, heat, electricity, dietetics and massage. It does not include the use of drugs, surgery and x-ray or radiation (except for diagnostic purposes). Many naturopaths are former chiropractors and use chiropractic treatment." (2)

The National Center of Health Statistics estimates that fewer than 1,000 of these practitioners of drugless therapeutics are currently licensed in the United States. (3)

THE HEALTH MANPOWER PROJECT SURVEY

In May, 1969, licensure renewal questionnaires were sent to 91 naturopaths. A 73% response rate was achieved. It was found that 64% of the naturopaths licensed in Washington were professionally located in the state (4). A majority were actively practicing drugless therapeutics involving direct patient care. As a group, naturopaths were usually male and older than members of other health occupations. Although a large percentage failed to reply to questions regarding education, nearly half reported completion of high school. Three fourths of the naturopaths were licensed through complete examination, another 10% had obtained reciprocity on the basic science portion of their licensure examination.

The following table and figure give information based on survey findings.

Table 9 Drugless Therapeutics (Naturopaths) Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	%	Inactive	Ratio of Persons Per Active Professional
NORTH COAST	0	0	0	0	44,742:0
Clallam	0	0	0	0	34,510:0
Jefferson	0	0	0	0	10,232:0
SOUTH COAST	0	0	0	0	74,858:0
Grays Harbor	0	0	0	0	59,550:0
Pacific	0	0	0	0	15,308:0
NORTH PUGET SOUND	0	0	0	0	161,965:0
Island	0	0	0	0	25,900:0
San Juan	0	0	0	0	3,542:0
Skagit	0	0	0	0	51,146:0
Whatcom	0	0	0	0	81,377:0
CENTRAL PUGET SOUND	26	14	54%	12	135,624:1
King	20	11	55%	9	103,104:1
Kitsap	3	2	67%	1	48,606:1
Pierce	2	1	50%	1	405,238:1
Snohomish	1	0	0	1	262,150:0
SOUTH PUGET SOUND	3	1	33%	2	139,829:1
Lewis	1	0	0	1	44,485:0
Mason	1	0	0	1	19,975:0
Thurston	1	1	100%	0	75,369:1
LOWER COLUMBIA	1	1	100%	0	144,146:1
Clark	1	1	100%	0	126,446:1
Klickitat	0	0	0	0	11,959:0
Skamania	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	1	0	0	1	71,793:0
Cowlitz	1	0	0	1	68,450:0
Wahkiakum	0	0	0	0	3,343:0
UPPER COLUMBIA	2	2	100%	0	40,104:1
Chelan	1	1	100%	0	39,222:1
Douglas	0	0	0	0	16,227:0
Okanogan	1	1	100%	0	24,758:1

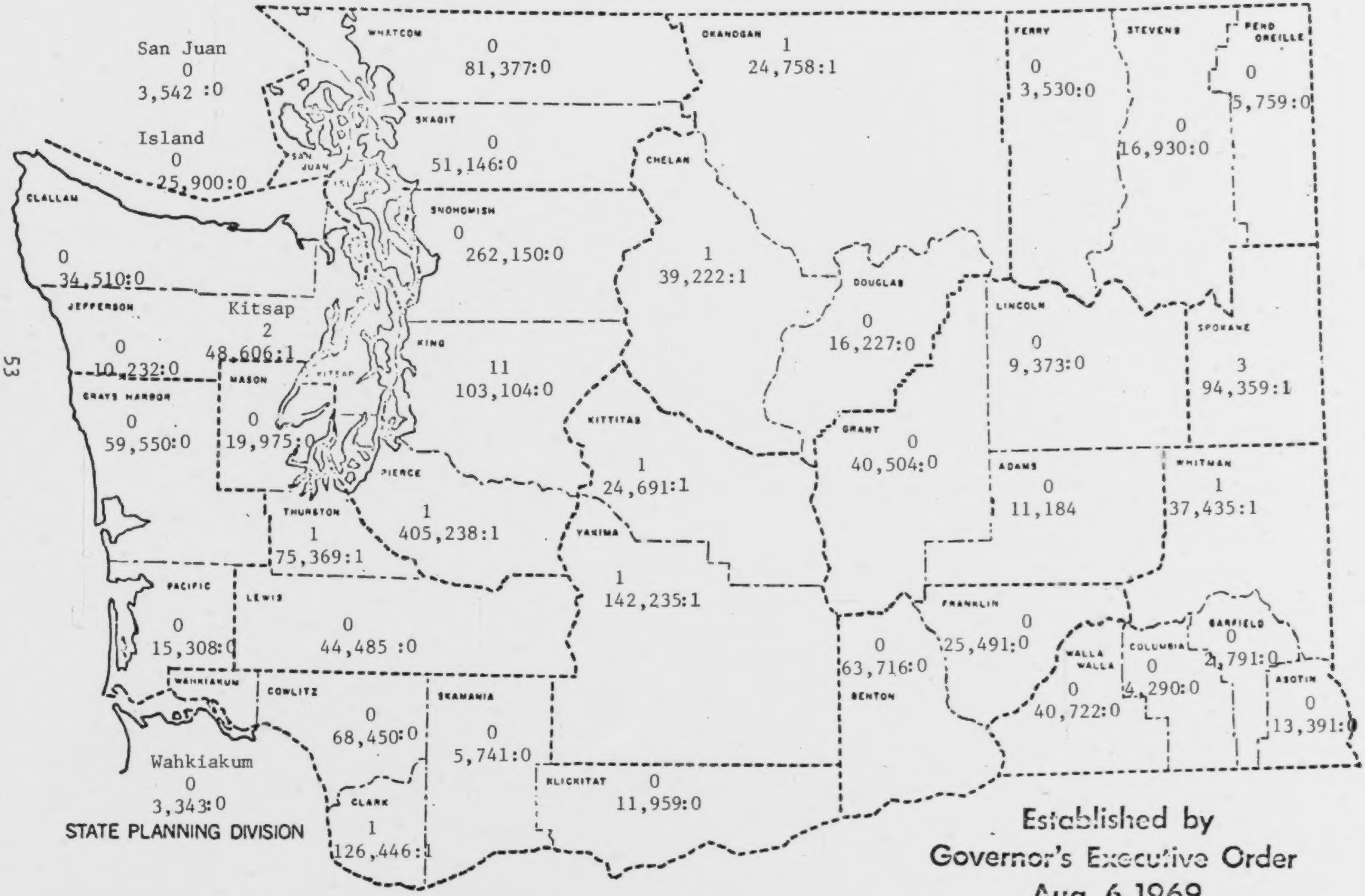
Table 9 Drugless Therapeutics (Naturopaths) (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	3	2	67%	1	83,463:1
Kittitas	2	1	50%	1	24,691:1
Yakima	1	1	100%	0	142,235:1
COLUMBIA BASIN	0	0	0	0	61,061:0
Adams	0	0	0	0	11,184:0
Grant	0	0	0	0	40,504:0
Lincoln	0	0	0	0	9,373:0
FOUR RIVERS	0	0	0	0	89,207:0
Benton	0	0	0	0	63,716:0
Franklin	0	0	0	0	25,491:0
NORTH EAST	0	0	0	0	26,219:0
Ferry	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	5,759:0
Stevens	0	0	0	0	16,930:0
SPOKANE	3	3	100%	0	94,359:1
Spokane	3	3	100%	0	94,359:1
SOUTH EAST	1	1	100%	0	53,617:1
Asotin	0	0	0	0	13,391:0
Garfield	0	0	0	0	2,791:0
Whitman	1	1	100%	0	37,435:1
BLUE MOUNTAIN	0	0	0	0	45,012:0
Columbia	0	0	0	0	4,290:0
Walla Walla	0	0	0	0	40,722:0
STATE TOTAL	42	26	62%	16	139,225:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals

Figure 5 Distribution by County of Drugless Therapeutics (Naturopaths) Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


San Juan
0
3,542 :0
Island
0
25,900:0
WHATCOM
0
81,377:0
OKANOGAN
1
24,758:1
FERRY
0
3,530:0
STEVENS
0
16,930:0
PEND OREILLE
0
5,759:0
SAN JUAN
ISLAND
SKAGIT
0
51,146:0
CHELAN
1
39,222:1
CLALLAM
0
34,510:0
SNOHOMISH
0
262,150:0
DOUGLAS
0
16,227:0
LINCOLN
0
9,373:0
SPOKANE
3
94,359:1
JEFFERSON
0
10,232:0
Kitsap
2
48,606:1
KITSAP
MASON
0
19,975:0
KING
11
103,104:0
KITTITAS
1
24,691:1
GRANT
0
40,504:0
ADAMS
0
11,184
WHITMAN
1
37,435:1
GRAYS HARBOR
0
59,550:0
PIERCE
1
405,238:1
THURSTON
1
75,369:1
YAKIMA
1
142,235:1
PACIFIC
0
15,308:0
LEWIS
0
44,485 :0
FRANKLIN
0
25,491:0
BENTON
0
63,716:0
WALLA WALLA
0
40,722:0
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
0
13,391:0
WAHKIAKUM
COWLITZ
0
68,450:0
SKAMANIA
0
5,741:0
KLICKITAT
0
11,959:0
CLARK
1
126,446:1
Wahkiakum
0
3,343:0
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

Data based on information gathered through the Division of Professional Licensing in consecutive three years are included in the following table.

Table 10 Information on Drugless Therapeutics (Naturopaths) Derived from Figures Gathered by the Division of Professional Licensing At Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	0	42,460:0	0	44,000:0	0	44,742:0
Clallam	0	32,780:0	0	33,500:0	0	34,510:0
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	1	76,071:1	1	79,100:1	0	74,858:0
Grays Harbor	1	60,218:1	1	62,500:1	0	59,550:0
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	0	162,797:0	1	170,700:0	1	161,965:1
Island	0	24,044:0	1	24,700:1	1	25,900:1
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	0	54,001:0	0	55,000:0	0	51,146:0
Whatcom	0	81,791:0	0	87,600:0	0	81,377:0
CENTRAL PUGET SOUND	43	41,887:1	37	50,670:1	43	44,157:1
King	30	36,176:1	25	44,772:1	29	39,108:1
Kitsap	3	32,119:1	3	34,267:1	3	32,404:1
Pierce	7	55,270:1	5	78,700:1	7	57,891:1
Snohomish	3	77,554:1	4	64,800:1	4	65,538:1
SOUTH PUGET SOUND	4	33,173:1	4	36,100:1	3	46,610:1
Lewis	1	47,696:1	1	48,500:1	1	44,485:1
Mason	1	18,287:1	1	20,700:1	0	19,975:0
Thurston	2	33,353:1	2	37,600:1	2	37,685:1
LOWER COLUMBIA	1	136,443:1	2	75,950:1	2	72,073:1
Clark	1	116,815:1	2	65,950:1	2	63,223:1
Klickitat	0	13,636:0	0	13,300:0	0	11,959:0
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	1	72,921:1	1	77,300:1	1	71,793:1
Cowlitz	1	69,150:1	1	73,100:1	1	68,450:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0
UPPER COLUMBIA	2	43,688:1	2	44,900:1	2	40,104:1
Chelan	1	42,891:1	1	43,300:1	1	39,222:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	1	27,601:1	1	27,500:1	1	24,758:1

Table 10 Drugless Therapeutics (Naturopaths) (Continued)

Planning Region and County	1968 NUMBER	1968 RATIO	1969 NUMBER	1969 RATIO	1970 NUMBER	1970 RATIO
YAKIMA VALLEY	3	61,036:1	3	61,767:1	3	55,642:1
Kittitas	2	11,475:1	2	12,650:1	2	12,346:1
Yakima	1	160,158:1	1	160,000:1	1	142,235:1
COLUMBIA BASIN	2	32,899:1	2	33,165:1	2	30,531:1
Adams	0	11,791:0	0	12,000:0	0	11,184:0
Grant	2	21,691:1	2	22,065:1	2	20,252:1
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	0	99,075:0	0	100,500:0	0	89,207:0
Benton	0	71,590:0	0	72,800:0	0	63,716:0
Franklin	0	27,485:0	0	27,700:0	0	25,491:0
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	8	37,497:1	9	33,333:1	9	31,453:1
Spokane	8	37,497:1	9	33,333:1	9	31,453:1
SOUTH EAST	2	26,601:1	2	27,450:1	2	26,809:1
Asotin	1	14,435:1	1	14,800:1	1	13,391:1
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	1	35,463:1	1	36,400:1	1	37,435:1
BLUE MOUNTAIN	0	50,610:0	0	49,900:0	0	45,012:0
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	0	45,605:0	0	44,900:0	0	40,722:0
Unknown	0		0		0	
STATE TOTAL	67	49,141:1	64	53,396:1	68	49,137:1

REFERENCES

1. LAW DEFINING AND REGULATING THE PRACTICE OF DRUGLESS THERAPEUTICS, 1969. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. HEALTH RESOURCES STATISTICS, 1969. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Chapter 6, P. 51

LICENSED PRACTICAL NURSE

Licensing Regulations

The following legal description of licensed practical nurses is a summary from the law regulating the practice of licensed practial nursing in Washington State.(1)

Scope of Licensee's Functions

Licensed practical nurses are permitted to perform for compensation, services required in the nursing care of the ill, injured or infirmed, under the direction of a licensed physician and surgeon, dentist, chiropodist, or under the direction and supervision of a licensed registered professional nurse and not involving the specialized education, knowledge, skill and exercise of independent judgment required in professional nursing.

A licensed practical nurse may also perform for compensation nursing care of the ill, injured, or infirmed, and in the course thereof is authorized, at or under the direction and supervision of a licensed physician and surgeon, osteopathic physician and surgeon, dentist, chiropodist (acting within the scope of his license), or at or under the direction and supervision of a licensed registered professional nurse, to administer drugs, medications, treatments, tests, injections and inoculations, whether or not the piercing of tissues is involved and whether or not a degree of independent judgment and skill is required, when selected to do so by one of the licensed practitioners mentioned above, or by a licensed registered professional nurse who need not be physically present; provided the order given by such licensed practitioners shall be reduced to writing within a reasonable time and made a part of the patient's record.

Educational Prerequisites

A practical nurse must have completed: at least a tenth grade course or its equivalent as determined by the Washington State board of practical nurse examiners; an approved course of not less than nine months for the training of practical nurses, or its equivalent, as determined by the board.

To be licensed as a licensed practical nurse a person must pass a written examination in such subjects as the board may determine within the scope of and commensurate within the work to be performed by a licensed practical nurse.

Reciprocity

The director may issue a license to practice as a licensed practical nurse without examination to any applicant who has completed an approved course in practical nursing prior to January 1, 1950. The director may also issue a license to practice as a licensed practical nurse without examination to any applicant who has been duly licensed or registered as a licensed practical nurse, or a person entitled to perform similar services, under a different title, under the laws of another state, territory or foreign country if, in the opinion of the board, the applicant has qualifications required in this state, and who establishes evidence thereof.

PROFESSIONAL FUNCTIONS

Someaspects of nursing functions have been described further in "Declaration of Functions of the Licensed Vocational Nurse"(2) than in the preceding legal description. The following paragraph summarizes selected statements for the purpose of providing a more complete picture of the profession.

The licensed practical nurse is taught the underlying principles of nursing care and is prepared to execute therapeutic and technical skills. She may assist in teaching and demonstrating nursing procedures to other personnel.

Through continuing education, she prepares to assume progressively more complex nursing responsibilities. The licensed practical nurse participates in the planning, implementation and evaluation of nursing care and teaches the maintenance of health and prevention of disease. She observes and reports to the appropriate person significant symptoms, reactions and changes in the condition of the patient and records pertinent information.

THE HEALTH MANPOWER PROJECT SURVEY

The following selected statistical data are derived from the survey conducted by the Health Manpower Project, Division of Health and the Division of Professional Licensing.

All practical nurses licensed as of January 23, 1969 were surveyed. A total of 8,900 licensed practical nurses renewed their licenses; 96% returned the survey questionnaires.

Eighty-five percent of all respondents lived in Washington State. Residents were concentrated in counties with predominantly urban characteristics.

Seventy percent of the practical nurses were working in their profession, less than 10% were employed in other occupations. Three-quarters of the employed respondents were working full-time. Sixty-five percent worked in hospitals, three-fourths engaged primarily in direct patient care. Eighty percent had a high school education. One-fifth had continuing education training. About half of the practical nurses had five years or less experience within their field of training. This is surprising because their ages ranged from 20 to 64 years.

The following table shows information on residency and employment status classified by Comprehensive Health Planning Region and by county. Ratio of population per respondent actively participating in the labor force was added as an overall index of availability of practical nursing care. Data referring to participation in the workforce differ from those concerning residency because respondents did not complete all questionnaire items.

Statewide geographic distribution is graphically represented on the map following the table.

Table 11 Practical Nurses Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active		Inactive	Active In Another Occupation	Ratio of Persons Per Active Professional
		Number	%			
NORTH COAST	117	79	67%	29	9	566:1
Clallam	106	72	68%	26	8	479:1
Jefferson	11	7	64%	3	1	1,462:1
SOUTH COAST	189	139	74%	39	11	539:1
Grays Harbor	162	122	75%	34	6	488:1
Pacific	27	17	63%	5	5	900:1
NORTH PUGET SOUND	677	471	70%	160	46	344:1
Island	27	15	56%	10	2	1,727:1
San Juan	6	4	67%	2	0	886:1
Skagit	401	304	76%	72	25	168:1
Whatcom	243	148	61%	76	19	550:1
CENTRAL PUGET SOUND	3,510	2,359	67%	864	287	805:1
King	1,719	1,139	66%	427	153	996:1
Kitsap	247	163	66%	69	15	596:1
Pierce	1,069	752	70%	238	79	539:1
Snohomish	475	305	64%	130	40	860:1
SOUTH PUGET SOUND	277	198	71%	66	13	706:1
Lewis	119	93	78%	23	3	478:1
Mason	47	28	56%	17	2	713:1
Thurston	111	77	69%	26	8	979:1
LOWER COLUMBIA	411	301	73%	97	13	479:1
Clark	391	289	74%	90	12	438:1
Klickitat	17	9	53%	7	1	1,329:1
Skamania	3	3	100%	0	0	1,914:1
COWLITZ -WAHKIAKUM	162	114	70%	37	11	630:1
Cowlitz	159	112	70%	36	11	611:1
Wahkiakum	3	2	67%	1	0	1,672:1
UPPER COLUMBIA	184	140	76%	40	4	573:1
Chelan	129	105	81%	21	3	374:1
Douglas	30	21	70%	8	1	773:1
Okanogan	25	14	56%	11	0	1,768:1

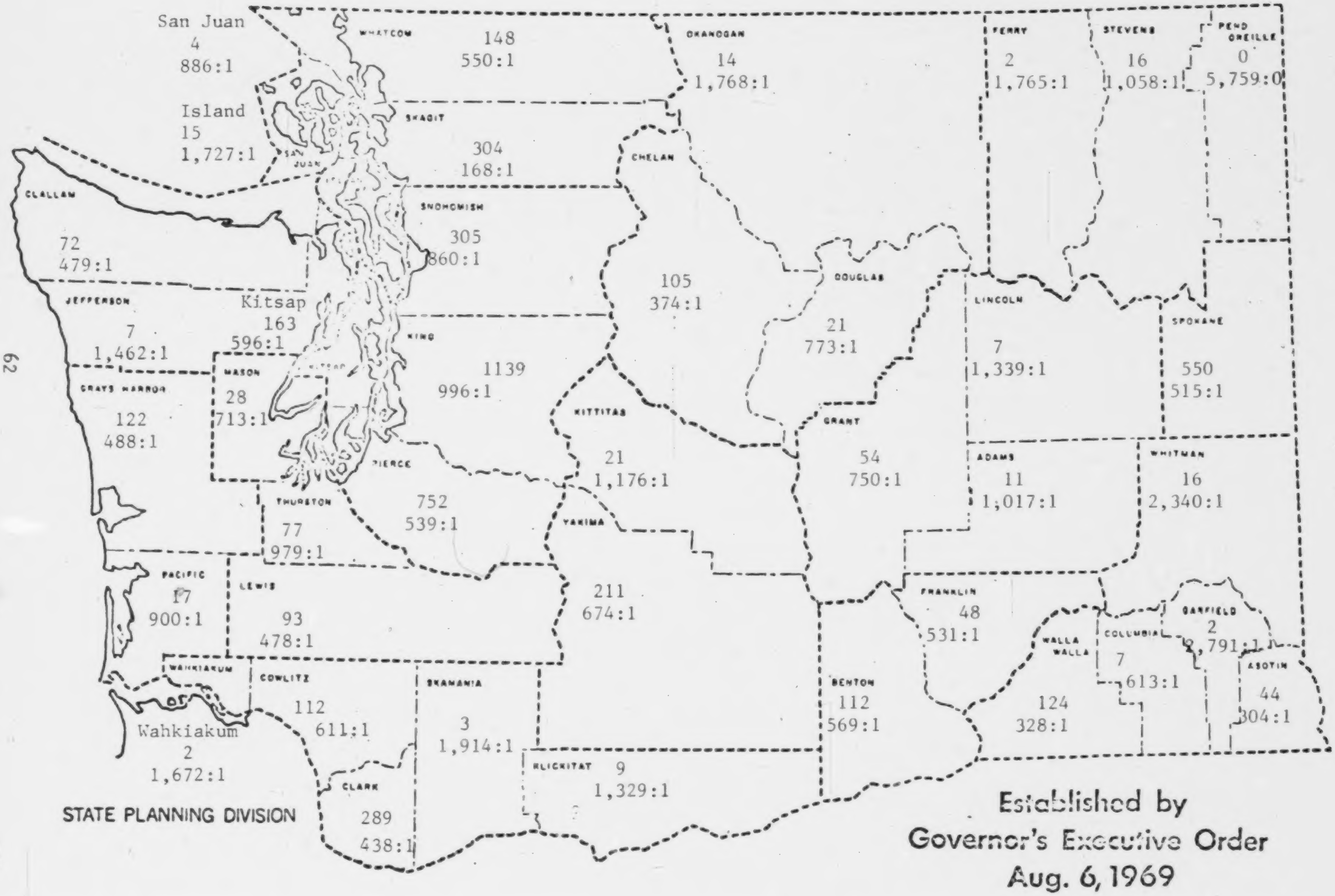
Table 11 Practical Nurses (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Active in Another Occupation	Ratio of Persons Per Active Professional
YAKIMA VALLEY	349	232	66%	95	22	720:1
Kittitas	34	21	62%	11	2	1,176:1
Yakima	315	211	67%	84	20	674:1
COLUMBIA BASIN	102	72	71%	25	5	848:1
Adams	14	11	78%	3	0	1,017:1
Grant	72	54	75%	15	3	750:1
Lincoln	16	7	44%	7	2	1,339:1
FOUR RIVERS	224	160	71%	55	9	558:1
Benton	154	112	73%	36	6	569:1
Franklin	70	48	68%	19	3	531:1
NORTH EAST	22	18	82%	4	0	1,457:1
Ferry	2	2	100%	0	0	1,765:1
Pend Oreille	0	0	0	0	0	5,759:0
Stevens	20	16	80%	4	0	1,058:1
SPOKANE	715	550	77%	150	15	515:1
Spokane	715	550	77%	150	15	515:1
SOUTH EAST	88	61	69%	22	5	879:1
Asotin	64	44	69%	16	4	304:1
Garfield	2	1	50%	1	0	2,791:1
Whitman	22	16	73%	5	1	2,340:1
BLUE MOUNTAIN	166	131	79%	30	5	344:1
Columbia	11	7	64%	4	0	613:1
Walla Walla	155	124	80%	26	5	328:1
STATE TOTAL	7,256	5,061	70%	1,706	354	660:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 6 Distribution by County of Licensed Practical Nurses Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


San Juan
4
886:1
Island
15
1,727:1
WHATCOM
148
550:1
SKAGIT
304
168:1
SAN JUAN
CLALLAM
72
479:1
SNOHOMISH
305
860:1
JEFFERSON
7
1,462:1
Kitsap
163
596:1
KITSAP
KING
1139
996:1
MASON
28
713:1
GRAYS HARBOR
122
488:1
PIERCE
752
539:1
THURSTON
77
979:1
PACIFIC
17
900:1
LEWIS
93
478:1
WAHKIAKUM
Wahkiakum
2
1,672:1
COWLITZ
112
611:1
CLARK
289
438:1
SKAMANIA
3
1,914:1
OKANOGAN
14
1,768:1
CHELAN
105
374:1
KITTITAS
21
1,176:1
YAKIMA
211
674:1
KLICKITAT
9
1,329:1
DOUGLAS
21
773:1
GRANT
54
750:1
BENTON
112
569:1
FERRY
2
1,765:1
STEVENS
16
1,058:1
PEND OREILLE
0
5,759:0
LINCOLN
7
1,339:1
SPOKANE
550
515:1
ADAMS
11
1,017:1
WHITMAN
16
2,340:1
FRANKLIN
48
531:1
WALLA WALLA
124
328:1
COLUMBIA
7
613:1
GARFIELD
2
2,791:1
ASOTIN
44
304:1
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

Data based on licensing information

Information in the following table is not based on Health Manpower Project surveys, but on data which are gathered annually at time of licensure renewal. They make it possible to scrutinize trends which had occurred during the last three years.

Table 12 Information on Practical Nursing Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	122	348:1	134	328:1	150	298:1
Clallam	111	295:1	122	275:1	137	252:1
Jefferson	11	880:1	12	875:1	13	787:1
SOUTH COAST	196	382:1	207	382:1	224	334:1
Grays Harbor	169	356:1	177	353:1	196	288:1
Pacific	27	587:1	30	553:1	28	547:1
NORTH PUGET SOUND	751	217:1	751	227:1	817	198:1
Island	40	601:1	36	686:1	38	682:1
San Juan	4	740:1	4	850:1	4	886:1
Skagit	428	126:1	434	127:1	481	106:1
Whatcom	279	293:1	277	316:1	294	277:1
CENTRAL PUGET SOUND	3,908	461:1	4,033	465:1	4,431	429:1
King	1,963	553:1	2,003	559:1	2,186	519:1
Kitsap	262	368:1	274	375:1	302	322:1
Pierce	1,213	319:1	1,244	316:1	1,381	293:1
Snohomish	470	495:1	512	506:1	562	467:1
SOUTH PUGET SOUND	319	416:1	312	463:1	349	401:1
Lewis	134	356:1	134	362:1	147	303:1
Mason	53	345:1	55	376:1	59	339:1
Thurston	132	505:1	123	611:1	143	527:1
LOWER COLUMBIA	434	314:1	452	336:1	484	298:1
Clark	414	282:1	431	306:1	461	274:1
Klickitat	18	758:1	18	739:1	19	629:1
Skamania	2	2,991:1	3	2,250:1	4	1,435:1
COWLITZ-WAHKIAKUM	168	434:1	182	425:1	199	361:1
Cowlitz	165	419:1	178	411:1	194	353:1
Wahkiakum	3	1,257:1	4	1,050:1	5	669:1

Table 12 LPN's (Continued

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	205	426:1	213	422:1	236	340:1
Chelan	144	298:1	154	281:1	168	234:1
Douglas	28	603:1	27	704:1	35	464:1
Okanogan	33	836:1	32	859:1	33	750:1
YAKIMA VALLEY	421	435:1	406	456:1	441	379:1
Kittitas	46	499:1	36	703:1	41	602:1
Yakima	375	427:1	370	432:1	400	356:1
COLUMBIA BASIN	110	598:1	114	582:1	133	459:1
Adams	14	842:1	17	706:1	21	533:1
Grant	83	523:1	84	525:1	96	422:1
Lincoln	13	817:1	13	785:1	16	586:1
FOUR RIVERS	243	408:1	242	415:1	272	328:1
Benton	176	407:1	167	436:1	189	337:1
Franklin	67	410:1	75	369:1	83	307:1
NORTH EAST		1,026:1	28	1,014:1	30	874:1
Ferry	3	1,299:1	2	1,800:1	2	1,765:1
Pend Oreille	8	900:1	6	1,083:1	6	960:1
Stevens	17	1,036:1	20	915:1	22	770:1
SPOKANE	780	385:1	826	363:1	930	304:1
Spokane	780	385:1	826	363:1	930	304:1
SOUTH EAST	102	522:1	98	560:1	105	511:1
Asotin	74	195:1	68	218:1	71	189:1
Garfield	4	826:1	4	925:1	3	930:1
Whitman	24	1,478:1	26	1,400:1	31	1,208:1
BLUE MOUNTAIN	202	251:1	189	264:1	222	203:1
Columbia	13	385:1	11	455:1	12	358:1
Walla Walla	189	241:1	178	252:1	210	194:1
Unknown	35		56		6	
STATE TOTAL	8,024	410:1	8,243	415:1	9,029	370:1

REFERENCES

1. LICENSED PRACTICAL NURSES ACT, Revised 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. DECLARATION OF FUNCTIONS OF THE LICENSED PRACTICAL/VOCATIONAL NURSE, July 1969. Journal of Practical Nursing leaflet

3. REPORT ON PRACTICAL NURSES LICENSED IN WASHINGTON STATE, November 1969. Health Manpower Project, Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCES

HEALTH MANPOWER SOURCE BOOK, Allied Health Manpower, 1950-80, Section 21. U.S. Public Health Service Publication 263, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

KNOW YOUR LPN'S -- WHO THEY ARE, WHERE THEY WORK, WHAT THEY DO, 1968. National Federation of Licensed Practical Nurses, Inc., 250 West 57th Street, New York, NY 10019

NURSING HOME ADMINISTRATOR

Licensing Regulations

The following legal description of a nursing home administrator is a summary from the Nursing Home Administrator Licensing Act (1).

Scope of Licensee's Functions

A nursing home administrator means an individual in active administrative charge of nursing homes, whether or not he has ownership interest in such homes and although functions and duties may be shared with or designated to other personnel. Applicants for a license need not be administering a nursing home at the time of application.

Educational Prerequisites

A license shall be issued to any person who has satisfactorily completed a course of instruction and training concerning nursing home or health facility administration approved by the Board, or presents evidence of at least two years of practical experience in the field of institutional administration which is equivalent to two years of experience in the operation of a nursing home: all to the satisfaction of the Board of Nursing Home Examiners. In addition, applicant must pass an examination administered by the Board. Except that, applicants who demonstrate that they have acted as nursing home administrators during the calendar year preceding July 1, 1970 and who are twenty-one years of age and of good moral character, may be issued a provisional license. If the provisional licensee has qualified to take and has passed the board's examination prior to the expiration of the provisional license, a nursing home administrator's license shall be issued to him. A program of training and instruction will be provided for provisional licensed nursing home administrators to attain qualifications necessary to be fully licensed as provided in this 1970 Act.

Reciprocity

Upon receipt of application and fee, the director may issue a nursing home administrator's license, without examination, to any person who holds a current license as a nursing home administrator from another jurisdiction provided that the standards for licensing are at least the substantial equivalent of those in this state (as determined by the board) and that the applicant is otherwise qualified.

All nursing home administrators are licensed as of July 1, 1970. In Washington this means that they have qualified by experience or training to take a written examination and obtained a passing score. Nursing home administrators are required to attend 36 hours of continuing education every 3 years.

PROFESSIONAL FUNCTIONS

"Nursing home administrator" means any individual who by training and experience is qualified to assume the responsibility for planning, organizing direction and/or controlling the operation of a nursing home.

Practice of Nursing Home Administration

... shall mean any professional service or creative work requiring nursing home administration education/training and/or experience and the application of such to the planning, organizing, directing, and controlling of the total operation of a nursing home, or to such professional services or creative work as consultation, investigation, evaluation and operational planning of a nursing home." (2)

A further dimension of the nursing home administrator's role is to work closely with public and private agencies in the community and to achieve close cooperation with members of the professions and with allied health workers.

The following paragraph, taken from the American College of Nursing Home Administrators definition further clarifies the profession.

"To describe the principal, on site, full time administrator as the only one who is the nursing home administrator is similar to saying that only the medical director of a hospital is a doctor . . . Anyone who takes action or makes administrative decisions about the operations of the program is practicing nursing home administration and should, therefore, be considered as administrator. After all, the upshot of administrative action is an influence on the care program which ultimately influences the care of one or more patients or residents." (2)

The following table shows the geographic distribution of the nursing home administrators to whom licensing certificates were issued at the time of that first licensing procedure.

Extensive statewide data could not be gathered at that time because of large scale data gathering undertaken on a federal level. It is hoped that a statewide study can be conducted at some time in the future.

Table 13 Information on Nursing Home Administrators Derived From Figures Gathered by the Division of Professional Lisensing At Time of First Licensure Issuance

Planning Region and County	1968		1969		1971*	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST					3	14,914:1
Clallam					3	11,503:1
Jefferson					0	10,232:0
SOUTH COAST					8	11,145:1
Grays Harbor					8	7,444:1
Pacific					0	15,308:0
NORTH PUGET SOUND					24	6,749:1
Island					4	6,475:1
San Juan					2	1,771:1
Skagit					7	7,307:1
Whatcom					11	7,398:1
CENTRAL PUGET SOUND					180	10,549:1
King					109	10,405:1
Kitsap					9	10,801:1
Pierce					43	9,424:1
Snohomish					19	13,797:1
SOUTH PUGET SOUND					22	6,356:1
Lewis					8	5,561:1
Mason					2	9,988:1
Thurston					12	6,281:1
LOWER COLUMBIA					15	9,610:1
Clark					14	9,032:1
Klickitat					1	11,959:1
Skamania					0	5,741:0
COWLITZ-WAHKIAKUM					6	11,966:1
Cowlitz					6	11,408:1
Wahkiakum					0	3,343:0
UPPER COLUMBIA					6	14,967:1
Chelan					5	8,660:1
Douglas					0	16,227:0
Okanogan					1	2,750:1

* Figures as of January 21, 1971

Table 13 Nursing Home Administrators (Continued)

	1968		1969		1971	
Planning Region and County	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY					27	6,182:1
Kittitas					2	12,346:1
Yakima					25	5,689:1
COLUMBIA BASIN					2	30,531:1
Adams					0	11,184:0
Grant					2	20,252:1
Lincoln					0	9,373:0
FOUR RIVERS					7	12,439:1
Benton					7	9,102:1
Franklin					0	25,491:0
NORTH EAST					1	26,219:1
Ferry					0	3,530:0
Pend Oreille					0	5,759:0
Stevens					1	16,930:1
SPOKANE					38	7,449:1
Spokane					38	7,449:1
SOUTH EAST					4	13,404:1
Asotin					3	4,464:1
Garfield					0	2,791:0
Whitman					1	37,435:1
BLUE MOUNTAIN					11	4,092:1
Columbia					2	2,145:1
Walla Walla					9	4,525:1
Unknown					0	
STATE TOTAL					354	9,439:1

REFERENCES

1. LAW RELATING TO NURSING HOME ADMINISTRATORS, 1970. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. DEFINITION OF THE PROFESSION. American College of Nursing Home Administrators, 8641 Colesville Road, Silver Springs, MD 20910

ADDITIONAL REFERENCES

BARANAN, Aaron, DISTILLATION CONFERENCE. 1970 Nursing Homes P 25

BLUMBERG, Bernard, M.D.: AGING, A PHILOSOPHY OF CARE, 1969

McQUILLAN, Florence L., R.N.,M.S.: FUNDAMENTALS OF NURSING HOME ADMINISTRATION, 1967

JOURNALS: "Modern Nursing Homes" and "The Gerontologist"

LONG TERM CARE FACILITY ADMINISTRATION: A Case Study Manual, 1970. U.S. Public Health Service Publication, No. 373-050, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

OPTOMETRY

Licensing Regulations

The following legal description of optometry is a summary from the law regulating the practice of optometry in Washington State.(1)

Scope of Licensee's Functions

The practice of optometry legally refers to three activities: the advertising of services purporting to examine eyes in any manner; the testing of the eyes in any manner, and third, the adapting of lenses to the human eye for any purpose. In addition, the law prohibits 15 acts ranging from the selling or bartering of a license to the use of false advertising.

Educational Prerequisites

To be eligible for an examination for registration the applicant should have a preliminary education of or equal to four years in a state high school, have completed a full attendance course in a regularly chartered school of optometry maintaining a sufficient academic standard. Prior to January 1, 1970, applicants were required to complete only two years in a state high school and could have studied at least three years in the office of a regularly registered optometrist or have successfully completed the examination of a board of optometry in another state in lieu of the completion of a school of optometry program.

Recriprocity

There is no provision for reciprocity of licensure with other states included in Washington law.

PROFESSIONAL FUNCTIONS

The following description is taken from the handbook Health Resources Statistics, 1969 (2) and provides a general introduction to this profession. The Health Manpower Project has not undertaken a study of this profession.

> "Optometrists examine the eyes and related structures to determine the presence of vision problems, eye diseases, or other abnormalities. They prescribe and adapt lenses or other optical aids and may use visual training aids, when indicated, to preserve or restore maximum efficiency of vision. They do not prescribe drugs, diagnose or treat eye diseases, or perform surgery."

The following table contains information gathered by the Division of Professional Licensing at time of licensure renewal. No additional survey has been conducted by the Health Manpower Progect up to the time of writing this report. Geographic distribution of optometrists can be seen in the table. There were three counties in 1970 without a member of this health profession holding active licensure.

Table 14 Information on Optometrists Derived from Figures Gathered by the Division of Professional Licensing at time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	7	6,066:1	8	5,500:1	8	5,593:1
Clallam	6	5,463:1	7	4,786:1	7	4,930:1
Jefferson	1	9,680:1	1	10,500:1	1	10,232:1
SOUTH COAST	8	9,509:1	9	8,789:1	8	9,357:1
Grays Harbor	7	8,603:1	8	7,813:1	7	8,507:1
Pacific	1	15,853:1	1	16,600:1	1	15,308:1
NORTH PUGET SOUND	23	7,078:1	23	7,422:1	24	6,749:1
Island	4	6,011:1	3	8,233:1	2	12,950:1
San Juan	1	2,961:1	1	3,400:1	1	3,542:1
Skagit	6	9,000:1	6	9,167:1	6	8,524:1
Whatcom	12	6,816:1	13	6,739:1	15	5,425:1
CENTRAL PUGET SOUND	204	8,829:1	206	9,101:1	210	9,042:1
King	130	8,348:1	132	8,479:1	130	8,724:1
Kitsap	13	7,412:1	14	7,343:1	13	7,478:1
Pierce	40	9,672:1	39	10,090:1	44	9,210:1
Snohomish	21	11,079:1	21	12,343:1	23	11,398:1
SOUTH PUGET SOUND	17	7,805:1	15	9,627:1	14	9,988:1
Lewis	7	6,814:1	6	8,083:1	6	7,414:1
Mason	2	9,144:1	2	10,350:1	2	9,988:1
Thurston	8	8,338:1	7	10,743:1	6	12,562:1
LOWER COLUMBIA	21	6,497:1	24	6,329:1	22	6,552:1
Clark	17	6,872:1	20	6,595:1	18	7,025:1
Klickitat	4	3,409:1	4	3,325:1	4	2,990:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	8	9,115:1	9	8,589:1	9	7,977:1
Cowlitz	8	8,644:1	9	8,122:1	9	7,606:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0

Table 14 Optometrists (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	11	7,943:1	11	8,164:1	12	6,684:1
Chelan	7	6,127:1	7	6,186:1	7	5,603:1
Douglas	0	16,883:0	0	19,000:0	1	16,227:1
Okanogan	4	6,900:1	4	6,875:1	4	6,190:1
YAKIMA VALLEY	20	9,155:1	21	8,824:1	22	7,988:1
Kittitas	2	11,475:1	3	8,433:1	3	8,230:1
Yakima	18	8,898:1	18	8,889:1	19	7,486:1
COLUMBIA BASIN	8	8,225:1	8	11,055:1	8	7,633:1
Adams	2	5,896:1	2	6,000:1	2	5,592:1
Grant	5	8,676:1	5	8,826:1	5	8,101:1
Lincoln	1	10,626:1	1	10,200:1	1	9,373:1
FOUR RIVERS	10	9,908:1	8	12,563:1	8	11,151:1
Benton	7	10,227:1	5	14,560:1	5	12,743:1
Franklin	3	9,162:1	3	9,233:1	3	8,497:1
NORTH EAST	3	9,572:1	3	9,467:1	3	8,740:1
Ferry	0	3,989:0	0	3,600:0	0	3,530:0
Pend Oreille	1	7,201:1	1	6,500:1	1	5,759:1
Stevens	2	8,808:1	2	9,150:1	2	8,465:1
SPOKANE	41	7,317:1	40	7,500:1	38	10,110:1
Spokane	41	7,317:1	40	7,500:1	38	10,110:1
SOUTH EAST	7	7,600:1	8	6,863:1	8	6,651:1
Asotin	1	14,435:1	1	14,800:1	1	13,391:1
Garfield	1	3,304:1	1	3,700:1	1	2,791:1
Whitman	5	7,093:1	6	6,067:1	6	6,210:1
BLUE MOUNTAIN	8	6,326:1	10	4,990:1	9	5,001:1
Columbia	1	5,005:1	1	5,000:1	1	4,290:1
Walla Walla	7	6,515:1	9	4,989:1	8	5,090:1
Unknown	3		2		0	
STATE TOTAL	399	8,252:1	405	10,907:1	403	8,291:1

REFERENCES

1. LAW DEFINING AND REGULATING THE PRACTICE OF OPTOMETRY, 1969. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. HEALTH MANPOWER SOURCE BOOK, Allied Health Manpower, 1950-80, Section 21. U.S. Public Health Service Publication 263, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

DOCTOR OF OSTEOPATHY

Licensing Regulations

The following legal description of osteopathic physicians is a summary from the law regulating the practice of osteopathy in Washington State.(1)

Scope of Licensee's Functions

A certificate shall be issued by the director of licenses authorizing the holder thereof to practice osteopathy and surgery, including the use of internal medicine and drugs, and shall be the only type of certificate issued. All certificates to practice osteopathy or osteopathy and surgery, including the use of internal medicine and drugs, heretofore issued shall remain in full force and effect.

Educational Prerequisites

An osteopathic physician and surgeon must hold a diploma from a legally chartered school of osteopathy and surgery, the requirements of which shall have been at the time of granting such diploma in no particular less than those prescribed by the American Osteopathic Association and the American Association of Osteopathic Colleges, or satisfactory evidence of having possessed such diploma.

To practice osteopathy and surgery, a person must furnish evidence that he has served for not less than one year as intern in a thoroughly equipped hospital which shall have had at least twenty-five beds for each intern devoted to the treatment of medical, surgical, gynecological and special diseases, and he also must have had a service of six weeks, or the equivalent thereof in the maternity department of the same or some other hospital, during which time he shall have attended or participated in the attendance upon not less than six confinements. He shall furnish evidence that he has had sufficient experience in and a practical working knowledge of pathology and the administering of internal medicine and drugs including anesthetics.

In addition to the preceding requirements, an examination is required. Subject matter of the examination includes anatomy, histology, gynecology, pathology, bacteriology, chemistry, toxiocology, physiology, obstetrics, general diagnosis, hygiene, principles and practice of osteopathy and any other branches thereof that the director of licenses shall deem advisable. Persons seeking a certificate to practice osteopathy and surgery shall also take an examination in surgery and the management of surgical cases (including anesthetics).

Reciprocity

Any person who holds a license authorizing him to practice osteopathy from a board of medical examiners heretofore existing under the provisions of the law of this state and any person having been examined and licensed to practice osteopathy by a state board of osteopathic examiners of another state shall be entitled to receive a license to practice osteopathy in this state--provided the law of such state is equal to that provided for by the provisions of Washington law.

PROFESSIONAL FUNCTIONS

In order to broaden the understanding of this profession, direct quotations from materials supplied by the American Osteopathic Association have been added to the legal description.(2)

"The most distinctive aspect of osteopathic medicine has been and is the continuous development of technics for releasing man's natural abilities to combat strains and stresses which may result in disease. As members of a complete school of medicine and surgery, osteopathic physicians and surgeons integrate all accepted methods of treatment of disease and injury, including manipulation, drugs, operative surgery and physical therapy as directed by the diagnosis of the individual patient.

"Health is held to be a total condition of the entire body, moreover, the focus of osteopathic medicine is upon treating the whole man, not just his disease. Osteopathic physicians favor those treatments which stimulate or assist man's natural abilities to maintain or return to a state of health.

"Osteopathic medicine contends that early symptoms of functional disease may be projected in the musculo-skeletal system of the patient. The osteopathic physician in his examination of this system often discovers these irregularities and can apply corrective treatment. Thus stress and strain may be removed, preventing a more serious condition from developing.

"The appreciation of the interrelationship of the structure and function of the human body is basic to understanding osteopathic concepts. Emphasis is placed upon the maintenance of health through prevention of disease by osteopathic management."

THE HEALTH MANPOWER PROJECT SURVEY

Although doctors of osteopathy are licensed, a special survey, not coinciding with renewal of licenses, was conducted in cooperation with the Washington Osteopathic Medical Association. Of the 412 potential respondents, 70% replied.

About half of the respondents (49%) lived in Washington; the other major states of residence were Oregon and Michigan. A majority of the osteopathic physicians living in Washington were residing in urban counties. Eighty-five percent worked full-time in osteopathic medicine and 87% were primarily engaged in patient care. Over three-fourths were in solo, rather than in group practice, and a majority reported general, rather than specialized practice.

About half had earned baccalaureate degrees in addition to their professional osteopathic degrees. About half of the respondents expressed satisfaction concerning the number and type of continuing education available to them.

The following table and figure show geographic distribution and employment status of 143 doctors of osteopathy residing with the state.

Table 15 Osteopaths Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	%	Inactive	Ratio of Persons Per Active Professional
NORTH COAST	0	0	0	0	44,742:0
Clallam	0	0	0	0	34,510:0
Jefferson	0	0	0	0	10,232:0
SOUTH COAST	0	0	0	0	74,858:0
Grays Harbor	0	0	0	0	59,550:0
Pacific	0	0	0	0	15,308:0
NORTH PUGET SOUND	9	6	67%	3	26,994:1
Island	0	0	0	0	25,900:0
San Juan	1	1	100%	0	3,542:1
Skagit	5	2	40%	3	25,573:1
Whatcom	3	3	100%	0	27,126:1
CENTRAL PUGET SOUND	85	79	93%	6	24,035:1
King	68	64	94%	4	17,720:1
Kitsap	3	3	100%	0	32,404:1
Pierce	5	5	100%	0	81,048:1
Snohomish	9	7	78%	2	37,450:1
SOUTH PUGET SOUND	6	2	33%	4	69,915:1
Lewis	1	1	100%	0	44,485:1
Mason	0	0	0	0	19,975:0
Thurston	5	1	20%	4	75,369:1
LOWER COLUMBIA	2	2	100%	0	72,073:1
Clark	2	2	100%	0	63,223:1
Klickitat	0	0	0	0	11,959:0
Skamania	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	3	3	100%	0	23,931:1
Cowlitz	2	2	100%	0	34,225:1
Wahkiakum	1	1	100%	0	3,343:1
UPPER COLUMBIA	4	3	75%	1	26,736:1
Chelan	2	2	100%	0	19,611:1
Douglas	0	0	0	0	16,227:0
Okanogan	2	1	50%	1	24,758:1

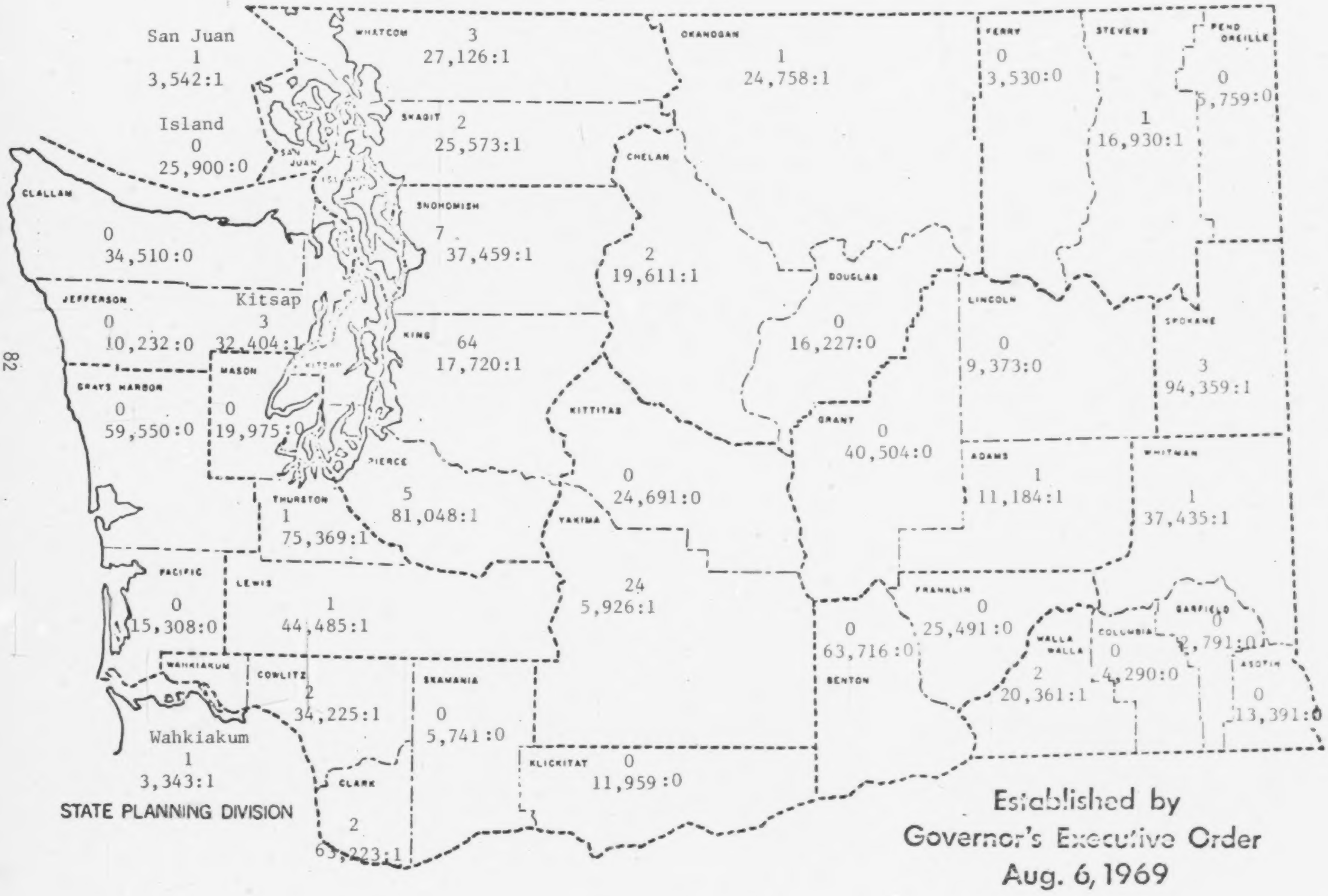
Table 15 Osteopaths (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	25	24	96%	1	6,955:1
Kittitas	0	0	0	0	24,691:0
Yakima	25	24	96%	1	5,926:1
COLUMBIA BASIN	1	1	100%	0	61,061:1
Adams	1	1	100%	0	11,184:1
Grant	0	0	0	0	40,504:0
Lincoln	0	0	0	0	9,373:0
FOUR RIVERS	0	0	0	0	89,207:0
Benton	0	0	0	0	63,716:0
Franklin	0	0	0	0	25,491:0
NORTH EAST	1	1	100%	0	26,219:1
Ferry	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	5,759:0
Stevens	1	1	100%	0	16,930:1
SPOKANE	3	3	100%	0	94,359:1
Spokane	3	3	100%	0	94,359:1
SOUTH EAST	1	1	100%	0	53,617:1
Asotin	0	0	0	0	13,391:0
Garfield	0	0	0	0	2,791:0
Whitman	1	1	100%	0	37,435:1
BLUE MOUNTAIN	2	2	100%	0	22,506:1
Columbia	0	0	0	0	4,290:0
Walla Walla	2	2	100%	0	20,361:1
STATE TOTAL	143	128	89%	15	26,310:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 7 Distribution by County of Osteopathic Physicians Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


San Juan
1
3,542:1
Island
0
25,900:0
Kitsap
3
32,404:1
Wahkiakum
1
3,343:1
STATE PLANNING DIVISION
WHATCOM
3
27,126:1
SKAGIT
2
25,573:1
SAN JUAN
ISLAND
SNOHOMISH
7
37,459:1
KING
64
17,720:1
KITSAP
PIERCE
5
81,048:1
THURSTON
1
75,369:1
CLALLAM
0
34,510:0
JEFFERSON
0
10,232:0
MASON
0
19,975:0
GRAYS HARBOR
0
59,550:0
PACIFIC
0
15,308:0
LEWIS
1
44,485:1
WAHKIAKUM
COWLITZ
2
34,225:1
CLARK
2
63,223:1
SKAMANIA
0
5,741:0
OKANOGAN
1
24,758:1
CHELAN
2
19,611:1
DOUGLAS
0
16,227:0
KITTITAS
0
24,691:0
YAKIMA
24
5,926:1
KLICKITAT
0
11,959:0
GRANT
0
40,504:0
BENTON
0
63,716:0
FERRY
0
3,530:0
STEVENS
1
16,930:1
PEND OREILLE
0
5,759:0
LINCOLN
0
9,373:0
SPOKANE
3
94,359:1
ADAMS
1
11,184:1
WHITMAN
1
37,435:1
FRANKLIN
0
25,491:0
WALLA WALLA
2
20,361:1
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
0
13,391:0
Established by
Governor's Executive Order
Aug. 6, 1969

Licensing Statistics - Osteopathic Physicians

Licensing statistics differ somewhat from survey information because of response rate as well as definition of term "active". The following table shows for the years 1968, 1969 and 1970 how many doctors of osteopathy held active licensing status and resided within designated counties. Comprehensive Health Planning regions are indicated.

Table 16 Information on Osteopathic Physicians and Surgeons Derived From Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	1	42,460:1	1	44,000:1	1	44,742:1
Clallam	1	32,780:1	1	35,500:1	1	34,510:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	1	76,071	1	79,100:1	1	74,858:1
Grays Harbor	1	60,218:1	1	62,500:1	1	59,550:1
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	6	27,133:1	6	28,450:1	5	32,393:1
Island	0	24,044:0	0	24,700:0	0	25,900:0
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	4	13,500:1	4	13,750:1	3	17,049:1
Whatcom	2	40,896:1	2	43,800:1	2	40,689:1
CENTRAL PUGET SOUND	128	14,072:1	134	28,800:1	142	13,371:1
King	106	10,239:1	112	9,994:1	118	9,611:1
Kitsap	3	32,119:1	3	34,267:1	3	32,404:1
Pierce	10	38,689:1	10	39,350:1	11	36,840:1
Snohomish	9	25,851:1	9	28,800:1	10	26,215:1
SOUTH PUGET SOUND	6	22,115:1	6	24,067:1	6	23,305:1
Lewis	1	47,696:1	1	48,500:1	1	44,485:1
Mason	0	18,287:0	0	20,700:0	0	19,975:0
Thurston	5	13,341:1	5	13,991:1	5	15,074:1
LOWER COLUMBIA	1	136,433:1	2	75,950:1	1	144,146:1
Clark	1	116,815:1	2	65,950:1	1	126,446:1
Klickitat	0	13,636:0	0	13,300:0	0	11,959:0
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	2	36,461:1	1	77,300:1	2	35,897:1
Cowlitz	2	34,575:1	1	73,100:1	2	34,225:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0

Table 16 Osteopath Physicians (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	3	26,736:1	5	17,960:1	5	16,041:1
Chelan	1	42,871:1	2	21,650:1	2	19,611:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	2	13,801:1	3	9,167:1	3	8,253:1
YAKIMA VALLEY	23	7,961:1	25	7,412:1	24	6,955:1
Kittitas	0	22,949:0	0	25,300:0	0	24,691:0
Yakima	23	6,963:1	25	6,400:1	24	5,927:1
COLUMBIA BASIN	2	32,899:1	1	66,330:1	1	61,061:1
Adams	2	5,896:1	1	12,000:1	1	11,184:1
Grant	0	43,381:0	0	44,130:0	0	40,504:0
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	1	99,075:1	0	100,500:0	1	89,207:1
Benton	0	71,590:0	0	72,800:0	1	63,716:1
Franklin	1	27,485:1	0	27,700:0	0	25,491:0
NORTH EAST	1	28,715:1	1	28,400:1	1	26,219:1
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	1	17,616:1	1	18,300:1	1	16,930:1
SPOKANE	5	59,995:1	3	100,000:1	3	94,359:1
Spokane	5	59,995:1	3	100,000:1	3	94,351:1
SOUTH EAST	2	26,601:1	1	54,900:1	2	26,809:1
Asotin	0	14,435:0	0	14,800:0	0	13,391:0
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	2	17,732:1	1	36,400:1	2	18,718:1
BLUE MOUNTAIN	3	16,870:1	2	24,950:1	2	22,506:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	3	15,202:1	2	22,450:1	2	20,361:0
Unknown	2		4		0	
STATE TOTAL	187	17,607:1	193	17,706:1	197	16,961:1

REFERENCES

1. LAW REGULATING THE PRACTICE OF OSTEOPATHY AND SURGERY, 1967. Department of Motor Vehicles, Division of Professional Licensing, P. O. Box 649, Olympia, WA 98501

2. THE OSTEOPATHIC PROFESSION: A Brochure. American Osteopathic Association, Department of Public Relations, 212 East Ohio Street, Chicago, IL 60611. (No date and no pagination)

3. REPORT ON DOCTORS OF OSTEOPATHY LICENSED IN WASHINGTON, September 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104. (Joint survey with the Washington Osteopathic Medical Association)

ADDITIONAL REFERENCES

A STATISTICAL STUDY OF THE OSTEOPATHIC PROFESSION, December 1967. Membership and Statistics Department, American Osteopathic Association, Chicago, IL 60611.

EDUCATION SUPPLEMENT BY THE OFFICE OF EDUCATION, American Osteopathic Association, January 1969, Vol. 21., No. 1

PHARMACIST

Licensing Regulations

The following legal description of pharmacists is a summary from the law regulating the practice of pharmacy in Washington State. (1)

Scope of Licensee's Functions

The practice of pharmacy means the practice of that profession concerned with the art and science of preparing, compounding and dispensing of drugs and devices, whether dispensed on the prescription of a medical practitioner or legally dispensed or sold directly to the ultimate consumer, and shall include the proper and safe storage and distribution of drugs, the maintenance of proper records therefor, and the responsibility of relating information as required concerning such drugs and medicines and their therapeutic values and uses in the treatment and prevention of disease: The practice of pharmacy shall not include the operations of a manufacturer or wholesaler if licensed as such.

Educational Prerequisites

1. To be a registered pharmacist a person must hold a degree in pharmacy granted by a school or college of pharmacy which is accredited by the board of pharmacy.

2. Has completed the internship requirements as prescribed.

3. Has satisfactorily passed such examinations given by the board. The said examination shall consist of two parts: the first part being a theoretical examination and the second part consisting of a practical examination which shall be given to all pharmacy interns who have successfully passed the theoretical examination and have satisfactorily passed their internship requirements. To insure proficiency in the practical aspects of pharmacy, the board shall, by regulation, prescribe internship requirements which must be satisfactorily completed prior to issuance of a pharmacist license.

Reciprocity

The board may, without examination other than one in the laws relating to the practice of pharmacy, license as a pharmacist any person who, at the time of filing application therefor, is and, for at least one year next preceding, has been licensed as a pharmacist in any other state, territory or possession of the United States: Provided, that the said person shall produce evidence satisfactory to the board of having had the required secondary and professional education and training and is possessed of good character and morals, who have become registered as pharmacists by examination in other states prior to the time this amendatory act takes effect shall be required to satisfy only the requirements which existed in this state at the time they became licensed in such other states: Provided further, that the state in which said person is licensed shall under similar conditions grant reciprocal registration as pharmacist without examination to pharmacists duly licensed by examination in this state.

PROFESSIONAL FUNCTIONS

In order to gain further understanding and realization of current trends in the profession of pharmacy, the literature was consulted and personal contact was made with members of the professional association and with the faculty of the School of Pharmacy, University of Washington. The following is a summary of these various sources of information.

Pharmacy is the health profession which is concerned with the preparation and distribution of medicinal products and entails a comprehensive knowledge of the physical and chemical composition, pharmacological action and therapeutic use of substances employed. The pharmacist practices in community and institutional pharmacies, and in academic and industrial settings. He is increasingly an important source for prescribers of information about drugs, their availability and activity. A national study found 86% of the active pharmacists in January 1967 practiced in community pharmacies, with the majority of the remaining pharmacists practicing in hospitals and related institutions such as nursing homes.(2)

There are several developing areas of practice in pharmacy. One of these is clinical pharmacy which is defined by a committee of the American Association of Colleges of Pharmacy as that area within the pharmacy curriculum which deals with patient care with emphasis on drug therapy. Clinical pharmacy seeks to develop a patient-oriented attitude with emphasis on interprofessional as well as patient communication.(3)

A recent study found that there were 1,082 licensed retail pharmacies, hospital pharmacies and drug rooms operating in Washington with 52% staffed by only one pharmacist, another third by two pharmacists.(4)

Pharmacists are graduates of either a five- or six-year program in an accredited College of Pharmacy. Following graduation they complete an internship then must pass a State Board examination before being registered as practitioners.

No special survey was conducted by the Health Manpower Project. It appeared that a fair amount of data was available through other surveys. The following table is based on information gathered by the Division of Professional Licensing at time of licensing renewal. No licensing figures were available for the year 1968. The geographic distribution of pharmacists holding active licenses in 1970 varies from two in Ferry, Skamania and Wahkiakum to 1,056 in King County.

Table 17 Information on Pharmacy Derived from Figures Gathered by the Division of Professional Licensing at time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST			27	1,629:1	31	1,443:1
Clallam			23	1,457:1	26	1,327:1
Jefferson			4	2,625:1	5	2,046:1
SOUTH COAST			45	1,758:1	47	1,593:1
Grays Harbor			36	1,736:1	38	1,066:1
Pacific			9	1,844:1	9	1,701:1
NORTH PUGET SOUND			106	1,610:1	116	1,396:1
Island			15	1,647:1	18	1,439:1
San Juan			5	680:1	5	708:1
Skagit			40	1,375:1	43	1,189:1
Whatcom			46	1,904:1	50	1,627:1
CENTRAL PUGET SOUND			1,418	1,322:1	1,549	1,226:1
King			969	1,155:1	1,056	1,074:1
Kitsap			65	1,581:1	74	1,314:1
Pierce			231	1,704:1	252	1,608:1
Snohomish			153	1,694:1	167	1,570:1
SOUTH PUGET SOUND			100	1,444:1	110	1,271:1
Lewis			32	1,517:1	34	1,308:1
Mason			15	1,380:1	15	1,332:1
Thurston			53	1,419:1	61	1,236:1
LOWER COLUMBIA			87	1,746:1	97	1,486:1
Clark			79	1,670:1	89	1,421:1
Klickitat			6	2,217:1	6	1,993:1
Skamania			2	3,350:1	2	2,871:1
COWLITZ-WAHKIAKUM			41	1,885:1	43	1,670:1
Cowlitz			39	1,874:1	41	1,670:1
Wahkiakum			2	2,100:1	2	1,672:1
UPPER COLUMBIA			71	1,265:1	77	1,042:1
Chelan			49	884:1	54	726:1
Douglas			3	6,333:1	3	5,409:1
Okanogan			19	1,447:1	20	1,238:1

Table 17 Pharmacy (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY			112	1,655:1	124	1,346:1
Kittitas			12	2,108:1	15	1,646:1
Yakima			100	1,600:1	109	1,305:1
COLUMBIA BASIN			55	1,026:1	61	1,001:1
Adams			13	923:1	17	658:1
Grant			29	1,522:1	32	1,266:1
Lincoln			13	785:1	12	781:1
FOUR RIVERS			68	1,478:1	74	1,206:1
Benton			50	1,456:1	56	1,138:1
Franklin			18	1,539:1	18	1,416:1
NORTH EAST			20	1,420:1	21	1,249:1
Ferry			2	1,800:1	2	1,765:1
Pend Oreille			5	1,300:1	6	960:1
Stevens			13	1,408:1	13	1,302:1
SPOKANE			221	1,358:1	250	1,132:1
Spokane			221	1,358:1	250	1,132:1
SOUTH EAST			48	1,[illegible]44:1	55	975:1
Asotin			9	1,644:1	11	1,217:1
Garfield			2	1,850:1	2	1,396:1
Whitman			37	984:1	42	891:1
BLUE MOUNTAIN			36	1,386:1	46	979:1
Columbia			2	2,500:1	3	1,430:1
Walla Walla			34	1,321:1	43	947:1
STATE TOTAL			2,461	1,389:1	2,704	1,236:1

REFERENCES

1. STATUTES, RULES AND REGULATIONS GOVERNING THE PRACTICE OF PHARMACY Washington State Board of Pharmacy, 319 East 7th Avenue, Olympia, WA 98501

2. HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Pp. 151-158

3. CLINICAL PHARMACY--WHAT, WHY, AND WHEN, September 1970. Washington Pharmacist, Pp. 6-8

4. MANPOWER--PLUS OR MINUS, September 1970. Washington Pharmacist, Pp. 12-13

ADDITIONAL REFERENCES

NON-PROFESSIONAL PERSONNEL: ARE WE PUTTING THEM IN THE STAFFING PICTURE?, 1969. Hospital Pharmacy, Vol. 4., No. 5., Pp. 5-9

PHARMACY MANPOWER, UNITED STATES, 1966. U.S. Public Health Service Publication 1000, Series 14, No. 2., Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

RELIEVING THE MANPOWER PINCH, 1968. Hospital Pharmacy (Editorial), Vol. 3., No. 3., P. 7

PHYSICAL THERAPIST

Licensing Regulations

The following legal description of physical therapy is a summary from the law regulating the practice of physical therapy in Washington State.(1)

Scope of Licensee's Functions

A physical therapist treats any bodily or mental condition of any person by the use of the physical, chemical and other properties of heat, or cold, air, light, water, electricity, sound, massage and therapeutic exercise, which includes posture and rehabilitation procedures, or the performance of test of neuro muscular function as an aid to the diagnosis or treatment of any human condition. The use of Roentgen rays and radium for diagnostic and therapeutic purposes, and the use of electricity for surgical purposes, including cauterization, are not authorized.

Educational Prerequisites

To be a registered physical therapist a person must have obtained a high school education or its equivalent and have been graduated from an approved school of physical therapy. No school shall be approved unless it required four academic years of collegiate instruction which would include the applied sciences of anatomy, neuroanatomy, kinesiology, physiology, pathology, psychology, physics, physical therapy applied to medicine, neurology, orthopedics, pediatrics, psychiatry, surgery, medical ethics, technical procedures in the practice of physical therapy.

Reciprocity

Upon the recommendation of the examining committee, the director of licenses shall register as a physical therapist and shall furnish a certificate of registration to any person who is a physical therapist registered under the laws of another state or territory, or the District of Columbia, if the qualifications for such registration required of applicant were substantially equal to the requirements under this chapter and such person has practiced in such other state or territory or the District of Columbia for at least one year prior to application.

PROFESSIONAL FUNCTIONS

The following description of the profession is derived from the 1968-69 Occupational Outlook Handbook(2) and consultation with experts in the field.

Physical therapists help persons with disease or injuries to overcome their disabilities. Upon physicians' referrals, they administer treatments to alleviate pain, correct or minimize physical deformity, and improve the general health status of the individual.

To obtain information needed to develop the proper programs for treatment, physical therapists perform joint motion, muscle power, muscle-nerve or functional ability tests. They also keep records of their patients' progress during treatments and attend conferences with physicians and other medical personnel to discuss this progress. In many instances, they help disabled persons to accept their physical handicaps and learn how to increase their ability to perform. In these cases, physical therapists teach patients appropriate use and care for assistive devices, such as crutches, braces and wheelchairs. They may also show members of the patients' families how to continue treatment at home.

Some therapists are members of a rehabilitation team, which may include a physician, nurse, clinical social worker, occupational therapist, vocational counselor, and other specialists. Although qualified physical therapists may treat many types of patients, some specialize in caring for a specific patient population, such as children with cerebral palsy or adult stroke victims. Some may also instruct physical therapy students.

A license is required to practice physical therapy in the fifty states, the District of Columbia and Puerto Rico. In Washington, an applicant must have graduated from a school of physical therapy approved by the American Medical Association in collaboration with the American Physical Therapy Association. Licensure is granted when the candidate has successfully completed a state board examination and is renewed every three years.

The following information is based on data collected by the Division of Professional Licensing. Numbers refer to professionals who hold active licensing status. Population ratios are based on the population estimates for the respective year. The most recent licensing renewal was January 1971, and Health Manpower Project survey questionnaires were mailed to all applicants for renewal. At the time of this writing, questionnaires have not been prepared yet for data processing. A complete report will be available during Fall, 1971.

Table 18 Information on Physical Therapists Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	2	21,230:1	2	22,000:1	3	14,914:1
Clallam	2	16,390:1	2	16,750:1	3	11,503:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	3	25,357:1	3	26,367:1	3	24,953:1
Grays Harbor	2	30,109:1	2	31,250:1	2	29,775:1
Pacific	1	15,853:1	1	16,600:1	1	15,308:1
NORTH PUGET SOUND	14	12,865:1	17	10,041:1	22	7,362:1
Island	0	24,044:0	0	24,700:0	0	25,900:0
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	4	13,500:1	4	13,750:1	6	8,524:1
Whatcom	10	8,179:1	13	6,739:1	15	5,425:1
CENTRAL PUGET SOUND	267	6,746:1	308	6,087:1	327	5,807:1
King	186	5,835:1	217	5,158:1	234	4,847:1
Kitsap	10	9,636:1	10	10,280:1	11	8,838:1
Pierce	58	6,670:1	66	5,962:1	67	6,048:1
Snohomish	13	17,897:1	15	17,280:1	15	17,477:1
SOUTH PUGET SOUND	8	16,586:1	9	16,044:1	10	13,983:1
Lewis	2	23,848:1	2	24,250:1	2	22,243:1
Mason	0	18,287:0	0	20,700:0	0	19,975:0
Thurston	6	11,118:1	7	10,743:1	8	9,421:1
LOWER COLUMBIA	8	17,054:1	8	18,988:1	10	14,415:1
Clark	7	16,688:1	7	18,843:1	9	14,050:1
Klickitat	1	13,636:1	1	13,300:1	1	11,959:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	4	18,230:1	4	19,325:1	4	17,910:1
Cowlitz	4	17,288:1	4	18,275:1	4	17,113:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0
UPPER COLUMBIA	9	9,708:1	9	9,978:1	9	8,912:1
Chelan	7	6,127:1	7	61,86:1	7	5,603:1
Douglas	1	16,883:1	1	19,000:1	1	16,227:1
Okanogan	1	27,601:1	1	27,500:1	1	24,758:1

Table 18 Physical Therapists (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	9	20,345:1	9	20,589:1	10	16,693:1
Kittitas	1	22,949:1	1	25,300:1	1	24,691:1
Yakima	8	20,020:1	8	20,000:1	9	15,804:1
COLUMBIA BASIN	4	16,450:1	5	13,266:1	5	12,212:1
Adams	1	11,791:1	2	6,000:1	2	5,592:1
Grant	2	21,691:1	2	22,065:1	2	20,252:1
Lincoln	1	10,626:1	1	10,200:1	1	9,373:1
FOUR RIVERS	5	19,815:1	5	20,100:1	5	17,841:1
Benton	4	17,898:1	4	18,200:1	4	15,929:1
Franklin	1	27,485:1	1	27,700:1	1	25,491:1
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	30	9,999:1	33	9,091:1	34	8,326:1
Spokane	30	9,999:1	33	9,091:1	34	8,326:1
SOUTH EAST	4	13,301:1	5	10,980:1	5	10,723:1
Asotin	2	7,218:1	2	7,400:1	2	6,696:1
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	2	17,732:1	3	12,133:1	3	12,478:1
BLUE MOUNTAIN	6	8,435:1	8	6,238:1	8	5,627:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	6	7,601:1	8	5,613:1	8	5,090:1
Unknown	12		13		12	
STATE TOTAL	385	8,552:1	438	7,802:1	467	7,155:1

REFERENCES

1. PHYSICAL THERAPISTS PRACTICE ACT, STATE OF WASHINGTON, Revised 1961. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. EMPLOYMENT OUTLOOK FOR OCCUPATIONAL THERAPISTS, PHYSICAL THERAPISTS: Occupational Outlook Report Series Bulletin No. 1550-55. From the 1968-69 Occupational Outlook Handbook, U.S. Department of Labor, Bureau of Labor Statistics.

ADDITIONAL REFERENCES

A METHODOLOGY FOR OPTIMIZING THE TRAINING AND UTLIIZATION OF PHYSICAL THERAPY PERSONNEL, Rehabilitation Research Monograph No. 4. University of Florida, Regional Rehabilitation Research Institute, Gainesville, Florida, 32601

PHYSICAL THERAPY DEPARTMENTS, April 1970 issue of SPOTLIGHT. American Hospital Association, 840 North Lake Shore Drive, Chicago, IL 60611. Vol. 2, No. 6

PHYSICIAN AND SURGEON

Licensing Regulations

The following legal description of a physician and surgeon is a summary of the law regulating the practice of medicine and surgery in the State of Washington.

Scope of Licensee's Functions

The practice of medicine and surgery consists of the use of drugs of medicinal preparations in or upon human beings, severing or penetrating the tissues of human beings, and the use of any and all other methods in the treatment of diseases, injuries, deformities, or other physical or mental conditions, but shall not include the practice of chiropractic.

Educational Prerequisites[1]

A physician and surgeon must hold a diploma issued by a medical school accredited and approved by the Board of Medical Examiners, or by the Director of Licenses prior to March 21, 1961, as of the time the diploma was issued therefrom. After March 21, 1961, the Board shall not accredit or approve any medical school that does not meet the requirements set forth in RCW 18.17.055, as amended. To practice medicine and surgery, a person must furnish further evidence that he has served for no less than one year as intern in a thoroughly equipped hospital, having at least twenty-five beds for each intern, devoted to the treatment of medical, surgical, gynecological and special diseases. Some experience in and practical working knowledge of obstetrics is required as well as experience and practical working knowledge in pathology.

In addition to the preceding requirements, applicants for a certificate to practice medicine and surgery must be personally [2]examined by the board.

The subject matter of the examination includes anatomy, histology, gynecology, pathology, bacteriology, chemistry, toxicology, physicology, obstetrics, general diagnosis, practice of medicine and surgery and other branches that the board shall deem advisable.

---

1. The following summary of the medical practice act is as it stands at the present time. Modifications formulated during the current state legislative session are expected.

2. This does not mean applicant has to appear in person. His application is presented to the board. The board may call for a personal interview.

Reciprocity

Any person who holds a license authorizing him to practice medicine and surgery under the laws of another state, which through a reciprocity provision in its laws similarly accredits holders of certificates from proper authorities of this state to the full privileges of practice within its borders or an applicant who has satisfactorily passed examinations given by the National Board of Medical Examiners may, in the descretion of the board, be granted a license without examination, provided, that he has not previously failed to pass an examination held in this state.

DESCRIPTION OF THE PROFESSION

From the abundant literature describing many aspects of professional activities of the physician, some were selected to allow glimpses of the overall picture. Hopefully, these might provide the interested reader with a basis for further exploration.

Publications of the American Medical Association offer a concrete example of the sense of group identity. The American Medical Association has gathered information since 1906 reporting on location, specialty and professional activities of doctors of medicine. Categorization by specialties, federal or non-federal employment and active participation in the labor force, contribute to the usefulness of the statistical information.

The annual AMA publication "Distribution of Physicians, Hospitals and Hospital Beds in the U.S." (2) gives state and countywide data. The most recent volume, published in 1970, appeared in two parts adding metropolitan area data to previously reported types of information.

The assessment of the significance of professional (medical) service to society is reflected in discussions of "need" and "demand" for medical care, utilization of services by all segments of the population and reports on geographic distribution of physicians. "The Doctor Shortage" was discussed by Rashi Fein (3). Eli Ginzberg (4) argues the utilization of ratios of physician to population as an index of "need" for medical care.

The dynamic development of group identity is depicted in material referring to medical education. Descriptions of new directions such as current emphasis on family practice and on community medicine are part of this identity seeking procedure. The physician as an integral member of a team, including scientists as well as allied health workers, is described in the publication by the Royal Commission on Medical Education (5). The point is stressed that emphasis on medical education should lay on a future in which change is not only constant but should be perceived as normal. The division of labor can be expected to increase; training of allied health personnel will be for more specific range of tasks and the challenge to integrate the tasks into a coordinate health care delivery system evolves as the overall challenge for the present and the future.

GEOGRAPHIC DISTRIBUTION OF PHYSICIANS AND SURGEONS BY PARTICIPATION IN THE LABOR FORCE

The following information referring to the distribution of active and inactive medical physicians by planning region and county was compiled from data obtained from the Washington State Medical Education and Research Foundation, Seattle, Washington. Figures were current as of May, 1970, and refer to all active and inactive physicians in Washington State. Population figures are 1970 preliminary census counts as distributed by the Office of Fiscal Planning and Management, State of Washington.

Table No. 19 shows geographic distribution of physicians by professionally active status. Following these tables, geographic distribution by medical specialties will be presented.

Table 19 Medical Physicians Licensed In and Residing In Washington State by Participation in Labor Force

		Professionally Active			
Planning Region and County	Number Residing	Number	%	Inactive	Ratio of Persons Per Active Professional
NORTH COAST	43	39	91%	4	1,147:1
Clallam	31	30	97%	1	1,150:1
Jefferson	12	9	75%	3	1,137:1
SOUTH COAST	47	44	94%	3	1,701:1
Grays Harbor	36	35	97%	1	1,701:1
Pacific	11	9	82%	2	1,701:1
NORTH PUGET SOUND	195	184	94%	11	880:1
Island	27	24	89%	3	1,079:1
San Juan	7	4	57%	3	885:1
Skagit	76	73	96%	3	701:1
Whatcom	85	83	98%	2	980:1
CENTRAL PUGET SOUND	3,768	3,658	97%	110	546:1
King	2,800	2,727	98%	73	416:1
Kitsap	135	128	95%	7	759:1
Pierce	631	609	96%	22	665:1
Snohomish	202	194	96%	8	1,351:1
SOUTH PUGET SOUND	131	123	95%	6	1,119:1
Lewis	23	23	100%	0	1,934:1
Mason	12	11	92%	1	1,816:1
Thurston	96	91	95%	5	828:1
LOWER COLUMBIA	136	131	96%	5	1,100:1
Clark	126	122	97%	4	1,036:1
Klickitat	9	8	89%	1	1,495:1
Skamania	1	1	100%	0	5,741:1
COWLITZ-WAHKIAKUM	64	64	100%	0	1,122:1
Cowlitz	62	62	100%	0	1,104:1
Wahkiakum	2	2	100%	0	1,672:1
UPPER COLUMBIA	98	92	94%	6	873:1
Chelan	73	69	94%	4	568:1
Douglas	2	2	100%	0	8,113:1
Okanogan	23	21	91%	2	1,179:1

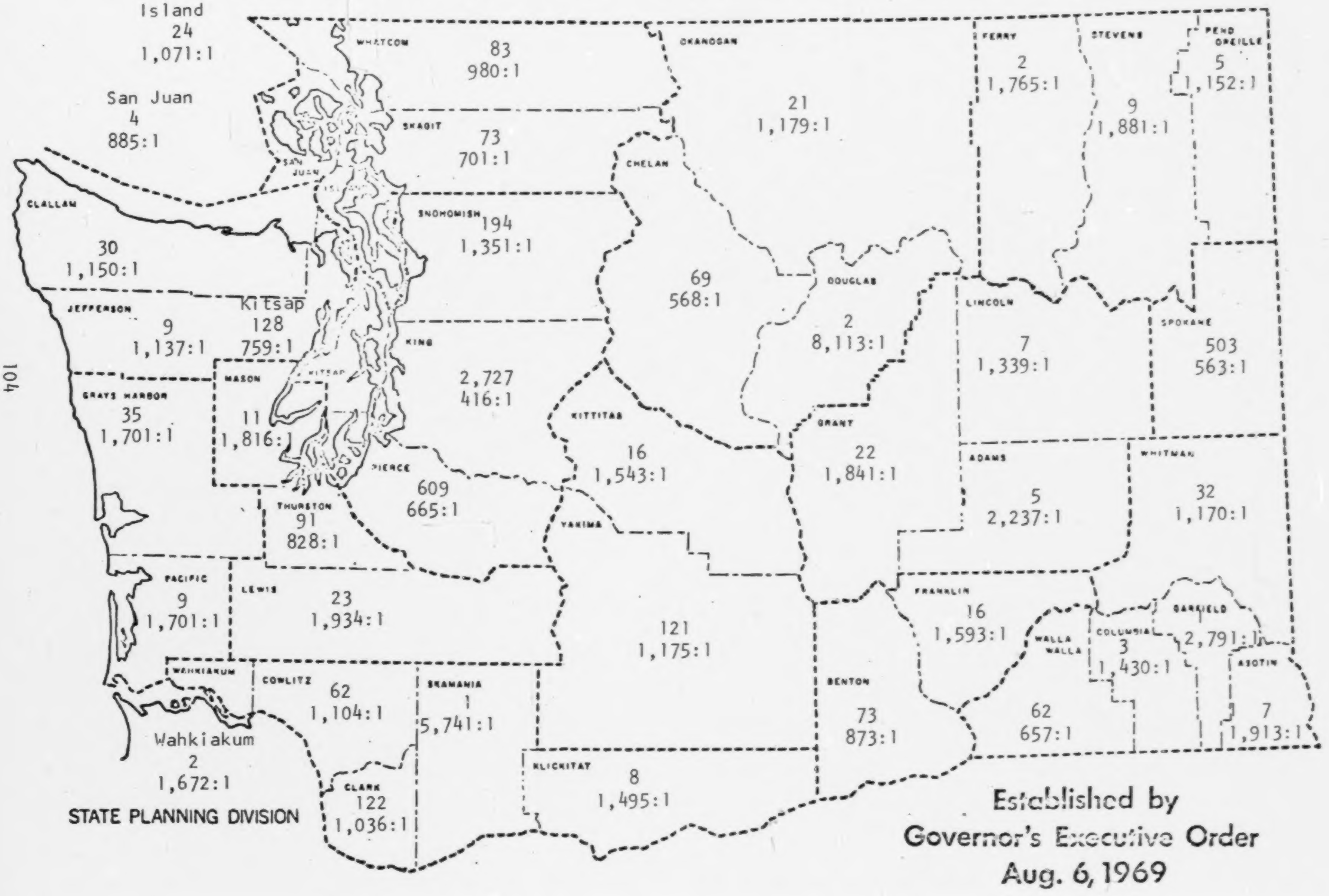
Table 19 Physicians (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	142	137	96%	5	1,218:1
Kittitas	16	16	100%	0	1,543:1
Yakima	126	121	96%	5	1,175:1
COLUMBIA BASIN	34	34	100%	0	1,796:1
Adams	5	5	100%	0	2,237:1
Grant	22	22	100%	0	1,841:1
Lincoln	7	7	100%	0	1,339:1
FOUR RIVERS	91	89	98%	2	1,002:1
Benton	75	73	97%	2	873:1
Franklin	16	16	100%	0	1,593:1
NORTH EAST	17	16	94%	1	1,639:1
Ferry	2	2	100%	0	1,765:1
Pend Oreille	5	5	100%	0	1,152:1
Stevens	10	9	90%	1	1,881:1
SPOKANE	515	503	98%	12	563:1
Spokane	515	503	98%	12	563:1
SOUTH EAST	40	40	100%	0	1,340:1
Asotin	7	7	100%	0	1,913:1
Garfield	1	1	100%	0	2,791:1
Whitman	32	32	100%	0	1,170:1
BLUE MOUNTAIN	68	65	95%	3	692:1
Columbia	4	3	75%	1	1,430:1
Walla Walla	64	62	97%	2	657:1
STATE TOTAL	5,389	5,221	97%	168	640:1

1. Data on physicians supplied by the Washington State Medical Education and Research Foundation, May, 1970.

2. Population figures are from the 1970 Preliminary Census Count supplied by the Office of Program Planning and Fiscal Management.

Figure 8 Distribution by County of Physicians and Surgeons Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


Island
24
1,071:1
San Juan
4
885:1
WHATCOM
83
980:1
SKAGIT
73
701:1
SAN JUAN
CLALLAM
30
1,150:1
JEFFERSON
9
1,137:1
Kitsap
128
759:1
KITSAP
MASON
11
1,816:1
GRAYS HARBOR
35
1,701:1
SNOHOMISH
194
1,351:1
KING
2,727
416:1
PIERCE
609
665:1
THURSTON
91
828:1
PACIFIC
9
1,701:1
LEWIS
23
1,934:1
WAHKIAKUM
Wahkiakum
2
1,672:1
COWLITZ
62
1,104:1
CLARK
122
1,036:1
SKAMANIA
1
5,741:1
OKANOGAN
21
1,179:1
CHELAN
69
568:1
DOUGLAS
2
8,113:1
KITTITAS
16
1,543:1
YAKIMA
121
1,175:1
KLICKITAT
8
1,495:1
GRANT
22
1,841:1
BENTON
73
873:1
FERRY
2
1,765:1
STEVENS
9
1,881:1
PEND OREILLE
5
1,152:1
LINCOLN
7
1,339:1
SPOKANE
503
563:1
ADAMS
5
2,237:1
WHITMAN
32
1,170:1
FRANKLIN
16
1,593:1
WALLA WALLA
62
657:1
COLUMBIA
3
1,430:1
GARFIELD
2,791:1
ASOTIN
7
1,913:1
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

PHYSICIAN SPECIALTIES

Group	Description
General Practice	General Practice
Medicine	Allergy
	Cardiovascular Disease
	Dermatology
	Gastroenerology
	Internal Medicine
	Pediatrics
	Pediatric Allergy
	Pediatric Cardiology
	Pulmonary Diseases
Surgery	Colon and Rectal Surgery
	General Surgery
	Neurological Surgery
	Obstetrics and Gynecology
	Ophthamology
	Orthopedic Surgery
	Otolaryngology
	Plastic Surgery
	Thoracic Surgery
	Urology
Other	Administrative Medicine
	Anesthesiology
	Aviation Medicine
	Child Psychiatry
	Diagnostic Roentgenologist
	Forensic Pathology
	General Preventive Medicine
	Neurology
	Occupational Medicine
	Pathology
	Physical Medicine & Rehabilitation
	Psychiatry
	Public Health
	Radiology
	Therapeutic Radiology
Other Specialty	Specialty Not Recognized

** Physician Specialties supplied by Washington State Medical Education and Research Foundation

Table 20

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

	NORTH COAST			SOUTH COAST		
	Clallam	Jefferson	TOTAL	Grays Harbor	Pacific	TOTAL
General Practice	18	5	23	19	6	25
Internal Medicine	--	1	1	--	--	--
Pediatrics	--	--	--	2	--	2
OB & Gyn	1	--	1	2	--	2
Ophthalmology	1	--	1	2	--	2
Otolaryngology	--	--	--	2	--	2
General Surgery	3	2	5	3	2	5
Orthopedic Surgery	--	1	1	--	--	--
Urological Surgery	1	--	1	--	--	--
Anesthesiology	1	--	1	--	--	--
Pathology	1	--	1	--	--	--
Psychiatry	1	--	1	1	--	1
Public Health	--	--	--	1	--	1
Radiology	2	--	2	2	1	3
Other Specialty	1	--	1	1	--	1
	30	9	39	35	9	44

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

NORTH PUGET SOUND

	Island	San Juan	Skagit	Whatcom	TOTAL
General Practice	8	3	32	28	71
Allergy	--	--	--	1	1
Cardiovas. Disease	--	--	1	--	1
Dermatology	--	--	--	1	1
Internal Medicine	3	--	4	6	13
Pediatrics	2	--	2	2	6
OB & Gyn	3	--	--	4	7
Ophthalmology	--	--	2	3	5
Otolaryngology	--	1	2	3	6
General Surgery	2	--	5	10	17
Neuro Surgery	--	--	--	1	1
Orthopedic Surgery	--	--	--	3	3
Thoracic Surgery	--	--	--	1	1
Urological Surgery	--	--	1	1	2
Aerospace Medicine	1	--	--	--	1
Anesthesiology	--	--	1	4	5
Gen. Preven. Medicine	1	--	--	--	1
Occupational Medicine	1	--	--	1	2
Pathology	--	--	1	3	4
Phys. Med. & Rehab.	--	--	--	1	1
Psychiatry	--	--	17	3	20
Public Health	--	--	1	--	1
Radiology	2	--	3	5	10
Other Specialty	1	--	1	2	4
	24	4	73	83	184

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

CENTRAL PUGET SOUND

	King	Kitsap	Pierce	Snohomish	TOTAL
General Practice	411	42	128	72	653
Allergy	7	--	1	--	8
Cardiovas. Disease	18	--	5	2	25
Dermatology	26	2	8	3	39
Gastroenterology	8	--	3	--	11
Internal Medicine	424	9	77	18	528
Pediatrics	222	8	35	13	278
Ped. Allergy	1	--	1	--	2
Ped. Cardiol.	1	--	--	--	1
Pulmonary Dis.	9	--	5	--	14
OB & Gyn	147	8	34	15	204
Ophthalmology	78	7	17	8	110
Otolaryngology	53	2	8	4	67
Col. & Rec. Surgery	8	--	--	--	8
General Surgery	238	15	48	14	315
Neuro Surgery	33	2	6	2	43
Orthopedic Surgery	93	3	22	10	128
Plastic Surgery	12	--	5	--	17
Thoracic Surgery	5	--	1	--	6
Urological Surgery	55	3	8	2	68
Aerospace Medicine	2	--	1	--	3
Anesthesiology	164	5	25	6	200
General Prev. Medicine	18	1	--	2	21
Neurology	30	--	2	1	33
Occupational Medicine	12	3	2	--	17
Pathology	101	3	21	3	128
Forensic Pathology	1	--	1	--	2
Phys. Med. & Rehab.	35	--	2	--	37
Psychiatry	192	5	56	7	260
Child Psychiatry	11	--	5	1	17
Public Health	16	--	1	2	19
Radiology	94	4	21	4	123
Therapeutic Rad.	5	--	--	--	5
Diag. Roentgen.	1	--	--	1	2
Other Specialty	196	6	60	4	266
	2,727	128	609	194	3,658

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

SOUTH PUGET SOUND

	Lewis	Mason	Thurston	TOTAL
General Practice	19	8	26	53
Dermatology	--	--	1	1
Internal Medicine	--	--	12	12
Pediatrics	1	--	4	5
OB & Gyn	1	--	7	8
Ophthalmology	1	--	2	3
Otolaryngology	--	--	2	2
General Surgery	--	--	6	6
Orthopedic Surgery	--	--	2	2
Urological Surgery	--	--	2	2
Anesthesiology	--	--	4	4
General Preven. Medicine	--	--	3	3
Neurology	--	--	1	1
Pathology	--	--	2	2
Psychiatry	--	2	4	6
Public Health	1	--	5	6
Radiology	--	--	5	5
Other Specialty	--	1	3	4
	23	11	91	125

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

	LOWER COLUMBIA				COWLITZ-WAHKIAKUM		
	Clark	Klickitat	Skamania	TOTAL	Cowlitz	Wahkiakum	TOTAL
General Practice	34	5	--	39	22	2	24
Dermatology	3	--	--	3	1	--	1
Internal Medicine	20	--	--	20	4	--	4
Pediatrics	6	--	--	6	3	--	3
OB & Gyn	7	--	--	7	3	--	3
Ophthalmology	6	--	--	6	2	--	2
Otolaryngology	1	--	--	1	1	--	1
General Surgery	14	1	--	15	6	--	6
Orthopedic Surgery	6	--	--	6	3	--	3
Thoracic Surgery	--	--	--	--	1	--	1
Urological Surgery	3	--	--	3	2	--	2
Anesthesiology	4	--	--	4	2	--	2
General Preven. Medicine	2	--	--	2	--	--	--
Occupational Medicine	--	--	--	--	2	--	2
Neurology	1	--	--	1	--	--	--
Pathology	6	--	1	7	3	--	3
Phys. Med. & Rehab.	1	--	--	1	--	--	--
Psychiatry	5	1	--	6	3	--	3
Radiology	2	--	--	2	3	--	3
Other Specialty	1	1	--	2	1	--	1
	122	8	1	131	62	2	64

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

UPPER COLUMBIA

	Chelan	Douglas	Okanogan	TOTAL
General Practice	19	2	19	40
Dermatology	1	--	--	1
Internal Medicine	8	--	--	8
Pediatrics	5	--	--	5
OB & Gyn	5	--	--	5
Ophthamology	5	--	--	5
Otolaryngology	5	--	--	5
General Surgery	6	--	--	6
Orthopedic Surgery	2	--	--	2
Urological Surgery	1	--	--	1
Anethesiology	2	--	--	2
Neurology	1	--	--	1
Pathology	3	--	--	3
Psychiatry	1	--	--	1
Radiology	4	--	--	4
Other Specialty	1	--	2	3
	69	2	21	92

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

YAKIMA VALLEY

	Kittitas	Yakima	TOTAL
General Practice	6	38	44
Allergy	--	1	1
Dermatology	--	2	2
Internal Medicine	2	11	13
Pediatrics	1	4	5
OB & Gyn	1	9	10
Ophthamology	--	6	6
Otolaryngology	2	2	4
General Surgery	4	17	21
Neuro Surgery	--	1	1
Orthopedic Surgery	--	4	4
Thoracic Surgery	--	2	2
Urological Surgery	--	3	3
Anesthesiology	--	6	6
Pathology	--	5	5
Psychiatry	--	1	1
Public Health	--	1	1
Radiology	--	6	6
Other Specialty	--	2	2
	16	121	137

Table 20 (Continued

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

COLUMBIA BASIN

	Adams	Grant	Lincoln	TOTAL
General Practice	2	16	6	24
Internal Medicine	1	2	--	3
Otolaryngology	--	2	--	2
General Surgery	--	2	1	3
Psychiatry	1	--	--	1
Other Specialty	1	--	--	1
	5	22	7	34

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

FOUR RIVERS

	Benton	Franklin	TOTAL
General Practice	19	9	28
Allergy	1	--	1
Internal Medicine	6	1	7
Pediatrics	4	--	4
OB & Gyn	8	--	8
Ophthamology	4	--	4
Otolaryngology	2	--	2
General Surgery	8	1	9
Neuro Surgery	1	--	1
Orthopedic Surgery	2	--	2
Urological Surgery	2	--	2
Anesthesiology	2	--	2
General Preven. Medicine	1	--	1
Neurology	2	--	2
Occupational Medicine	2	--	2
Pathology	2	1	3
Psychiatry	2	1	3
Public Health	--	1	1
Radiology	3	1	4
Other Specialty	2	1	3
	73	16	89

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

NORTHEAST

	Ferry	Pend Oreille	Stevens	TOTAL
General Practice	2	5	9	16
Other Specialty	--	--	--	--
	2	5	9	16

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty
Comprehensive Health Planning Region and County, 1970

SPOKANE

	Spokane	TOTAL
General Practice	122	122
Allergy	1	1
Cardiovas Disease	4	4
Dermatology	6	6
Gastroent	1	1
Internal Medicine	57	57
Pediatrics	19	19
Ped Cardiol	1	1
Pulmonary Dis	1	1
OB & Gyn	29	29
Ophthalmology	16	16
Otolaryngology	9	9
Col & Rec Surgery	1	1
General Surgery	56	56
Neuro Surgery	7	7
Orthopedic Surgery	24	24
Plastic Surgery	3	3
Thoracic Surgery	6	6
Urological Surgery	11	11
Aerospace Medicine	1	1
Anesthesiology	22	22
General Preven. Medicine	1	1
Neurology	2	2
Pathology	16	16
Phys Med & Rehab	1	1
Psychiatry	22	22
Child Psych	1	1
Public Health	1	1
Radiology	27	27
Other Specialty	35	35
	503	503

Table 20 (Continued)

Distribution of Practicing Physicians by Specialty Comprehensive Health Planning Region and County, 1970

	SOUTHEAST				BLUE MOUNTAIN		
	Asotin	Garfield	Whitman	TOTAL	Columbia	Walla Walla	TOTAL
General Practice	5	1	19	25	2	14	16
Internal Medicine	--	--	2	2	--	10	10
Pediatrics	--	--	1	1	--	2	2
OB & Gyn	1	--	1	2	--	3	3
Ophthalmology	1	--	1	2	--	3	3
Otolaryngology	--	--	--	--	--	1	1
General Surgery	--	--	1	1	1	10	11
Orthopedic Surgery	--	--	--	--	--	3	3
Urological Surgery	--	--	--	--	--	5	5
Anesthesiology	--	--	1	1	--	3	3
Pthology	--	--	1	1	--	2	2
Psychiatry	--	--	--	--	--	1	1
Radiology	--	--	2	2	--	3	3
Other Specialty	--	--	3	3	--	2	2
	7	1	32	40	3	62	65

The Division of Professional Licensing made available statistics concerning active license holders for the past three years. Ratios of population per physician, holding such license, were computed. This information, grouped by Comprehensive Health Planning regions, can be seen in the following table.

Table 21 Information on Physicians and Surgeons Derived from Figures Gathered by the Division of Professional Licensing at the Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	39	1,089:1	36	1,222:1	38	1,172:1
Clallam	31	1,055:1	27	1,241:1	27	1,278:1
Jefferson	8	1,210:1	9	1,167:1	11	930:1
SOUTH COAST	42	1,811:1	44	1,798:1	48	1,560:1
Grays Harbor	33	1,825:1	33	1,894:1	35	1,701:1
Pacific	9	1,761:1	11	1,509:1	13	1,178:1
NORTH PUGET SOUND	162	1,005:1	151	1,131:1	165	982:1
Island	19	1,266:1	11	2,246:1	12	2,158:1
San Juan	3	987:1	4	850:1	4	886:1
Skagit	65	831:1	63	873:1	68	752:1
Whatcom	75	1,091:1	73	1,200:1	81	1,005:1
CENTRAL PUGET SOUND	3,139	574:1	2,836	661:1	3,075	618:1
King	2,329	466:1	2,139	523:1	2,345	484:1
Kitsap	115	838:1	110	934:1	112	868:1
Pierce	515	751:1	405	972:1	426	951:1
Snohomish	180	1,293:1	182	1,424:1	192	1,365:1
SOUTH PUGET SOUND	112	1,185:1	117	1,234:1	127	1,101:1
Lewis	26	1,835:1	24	2,021:1	24	1,854:1
Mason	8	2,286:1	11	1,882:1	14	1,427:1
Thurston	78	596:1	82	917:1	89	847:1
LOWER COLUMBIA	119	1,147:1	111	1,369:1	112	1,287:1
Clark	110	1,062:1	102	1,306:1	104	1,216:1
Klickitat	8	1,717:1	7	1,900:1	6	1,993:1
Skamania	1	5,982:1	2	3,350:1	2	2,871:1
COWLITZ-WAHKIAKUM	57	1,279:1	61	1,267:1	64	1,122:1
Cowlitz	54	1,281:1	59	1,239:1	62	1,104:1
Wahkiakum	3	1,257:1	2	2,100:1	2	1,672:1

Table 21 Physicians and Surgeons (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	85	1,028:1	92	976:1	91	881:1
Chelan	64	670:1	67	646:1	68	577:1
Douglas	3	5,268:1	5	3,800:1	5	3,245:1
Okanogan	18	1,533:1	20	1,375:1	18	1,375:1
YAKIMA VALLEY	140	1,308:1	135	1,373:1	157	1,063:1
Kittitas	14	1,639:1	18	1,406:1	21	1,176:1
Yakima	126	1,271:1	117	1,368:1	136	1,046:1
COLUMBIA BASIN	38	1,732:1	37	1,793:1	37	1,650:1
Adams	5	2,358:1	6	2,000:1	5	2,237:1
Grant	27	1,607:1	23	1,919:1	24	1,688:1
Lincoln	6	1,771:1	8	1,275:1	8	1,172:1
FOUR RIVERS	88	1,126:1	88	1,142:1	85	1,050:1
Benton	71	1,008:1	71	1,025:1	67	951:1
Franklin	17	1,617:1	17	1,629:1	18	1,416:1
NORTH EAST	13	2,209:1	17	1,671:1	19	1,380:1
Ferry	2	1,949:1	2	1,800:1	2	1,765:1
Pend Oreille	3	2,400:1	5	1,300:1	6	960:1
Stevens	8	2,202:1	10	1,830:1	11	1,539:1
SPOKANE	439	683:1	445	674:1	467	606:1
Spokane	439	683:1	445	674:1	467	606:1
SOUTH EAST	37	1,438:1	40	1,373:1	40	1,340:1
Asotin	7	2,062:1	7	2,114:1	8	1,674:1
Garfield	2	1,652:1	2	1,850:1	1	2,791:1
Whitman	28	1,267:1	31	1,174:1	31	1,208:1
BLUE MOUNTAIN	63	803:1	55	907:1	61	738:1
Columbia	4	1,251:1	3	1,667:1	4	1,073:1
Walla Walla	59	773:1	52	864:1	57	714:1
Unknown	0		61		1	
STATE TOTAL	4,573	720:1	4,326	790:1	4,587	728:1

REFERENCES

1. LAW DEFINING AND REGULATING THE PRACTICE OF MEDICINE AND SURGERY IN THE STATE OF WASHINGTON, 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. DISTRIBUTION OF PHYSICIANS, HOSPITAL AND HOSPITAL BEDS IN THE U.S. 1969, Volume 1, Regional, State, County. Volume 2, Metropolitan areas, 1970. Department of Survey Research, American Medical Association, 535 North Dearborn Street, Chicago, IL 60610

3. FEIN, RASHI, "The Doctor Shortage: An Economic Diagnosis". 1967. The Brooking Institute, Washington, D.C. 20036

4. GINZBERG, ELI, "Facts and Fancies About Medical Care." May 1969. American Journal of Public Health, Vol. 59, No. 5, Pp. 785-794

5. ROYAL COMMISSION ON MEDICAL EDUCATION, 1965-68. Report presented to Parliament by command of Her Majesty, April 1968.

ADDITIONAL REFERENCES

LINER, F.E., "The Health of the American People", June 1966. Scientific American Journal, Vol. 214, No. 21.

MacFARLANE, J.A., "Royal Commission of Health Services, Medical Education in Canada,"1964.

MARTIN, E.D., "Where Graduates Go". The University of Kansas School of Medicine: A study of the Profile of 959 graduate and factors which influenced the geographic distribution, March 1968. Journal of Kansas Medicine, 69" Pp. 84-89.

MEDICAL EDUCATION IN THE UNITED STATES, the 1970 Annual Report on Medical Education, Council on Medical Education, American Medical Association, November 23, 1970. Journal of the American Medical Association, Vol. 214, No. 8, Pp. 1484-1549

TASK FORCE REPORTS ON THE COST OF HEALTH SERVICES IN CANADA, Vol. 1, Summary; Vol. 2, Hospital Services: Operational efficiency, salaries and wages, beds and facilities; Vol. 3, Health Services: Delivery of Medical Care: Price of Medical Care; Public Health, November 1969. Published under the authority of the Honourable John Munro, Minister of National Health and Welfare.

PODIATRIST

Licensing Regulations

The following legal description of chiropody-podiatry is a summary from the law regulating the practice of chiropody-podiatry in Washington State.(1)

Scope of Licensee's Functions

The practice of chiropody means the diagnosis and medical, surgical, mechanical, manipulative, and electrical treatments of ailments of the human foot, except:

(1) Amputation of the foot or toes; and
(2) The administration of an anaesthetic other than local, or the administration and prescription of drugs including narcotics other than required to perform the services authorized for the treatment of the feet; and
(3) Treatment of systemic conditions or the results and complications thereof.

Educational Prerequisites

To practice chiropody a person must hold a diploma or certificate of graduation from a legally incorporated, regularly established and recognized school of chiropody having as a minimum requirement not less than four thousand one hundred sixty scholastic hours given over a period of four years with personal attendance.

"Recognized" means official recognition by the Council of Education of the National Association of Chiropodists: Provided, that each applicant, prior to the beginning of his course in chiropody, must have as a minimum requirement, a four year course in a high school or its equivalent and the successful completion of a two year residence course of work of college grade leading toward the bachelor of science.

Examinations shall be conducted by an examining committee and shall be written and clinical. A minimum of ten questions on each subject shall be given. The examination shall embrace the subjects of: surgery, dermatology, anatomy, physiology, chemistry, bacteriology, pathology, clinical chiropody, and then questions on diagnosis, chiropodical medicine, materia medica, and therapeutics as one subject.

Reciprocity

Any applicant who has been examined and licensed under the laws of another state, which through a reciprocity provision in its laws, similarly accredits the holders of certificates from the proper authorities of this state to the full privileges of practice within its borders or an applicant who has satisfactorily passed examinations given by the National Podiatry Board, may, in the discretion of the examining committee be granted a license without examination on the payment of a fee of fifty dollars to the state treasurer: Provided, that he has not previously failed to pass an examination held in this state. If the applicant was licensed in another state, he must file with the director of licenses a copy of his license certified by the proper authorities of the issuing state to be a full and true copy thereof, and must show that the standards, eligibility requirements and examinations of that state are at least equal in all respects to those of this state.

Literature was consulted for information on the profession to supplement licensure regulations. The following is based on the literature. (2 and 3)

PROFESSIONAL FUNCTIONS

Podiatry is the health profession concerned with the care of the human foot. The podiatrist is responsible for the examination, diagnosis and treatment, both medically and surgically, of its diseases, injuries and defects.

Medical doctors, aware of the significant role played by podiatry, refer patients to podiatrists and consult with them in accredited hospitals and other institutions. The podiatrist in turn, when he recognizes systemic disease from early signs appearing in the feet, refers the patient to the appropriate medical doctor.

The podiatrist is a vital member of the health care team and has joined in public health services. In 1964 the District of Columbia Health Department became the first municipal health department in the United States to establish full-time podiatry clinics as part of its services. (4)

THE HEALTH MANPOWER PROJECT SURVEY

The report was based on a survey conducted by the Health Manpower Project. All podiatrists licensed as of May, 1969 were surveyed. Ninety-five percent of those renewing their licenses by January, 1970 responded to the questionnaire. Podiatrists living in Washington resided in the most populous counties with 42% in King County alone; no podiatrists resided in 23 counties (5).

Ninety five percent of the podiatrists were actively employed in their profession and 5% were retired. Nearly all respondents were active in private practice and performed direct patient care; 6% indicated a major work function of administration. Slightly over half of the respondents worked 40 to 49 hours in a typical week.

It was suggested that podiatrists constitute an older professional group when compared with other similar health professions. The most common professional degree was the Doctor of Surgical Chiropody.

The following table and figure show information on geographic distribution and participation in the labor force.

Table 22 Podiatrists Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
NORTH COAST	0	0	0	0	44,742:0
Clallam	0	0	0	0	34,510:0
Jefferson	0	0	0	0	10,232:0
SOUTH COAST	1	1	100%	0	74,858:1
Grays Harbpr	1	1	100%	0	59,550:1
Pacific	0	0	0	0	15,308:0
NORTH PUGET SOUND	3	2	67%	1	80,982:1
Island	0	0	0	0	25,900:0
San Juan	1	0	0	1	3,542:0
Skagit	1	1	100%	0	51,146:1
Whatcom	1	1	100%	0	81,377:1
CENTRAL PUGET SOUND	38	36	95%	2	52,742:1
King	25	24	96%	1	47,256:1
Kitsap	1	1	100%	0	97,212:1
Pierce	7	7	100%	0	57,891:1
Snohomish	5	4	80%	1	65,538:1
SOUTH PUGET SOUND	1	1	100%	0	139,829:1
Lewis	0	0	0	0	44,485:0
Mason	0	0	0	0	19,975:0
Thurston	1	1	100%	0	75,369:1
LOWER COLUMBIA	1	1	100%	0	144,146:1
Clark	1	1	100%	0	126,446:1
Klickitat	0	0	0	0	11,959:0
Skamania	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	0	0	0	0	71,973:0
Cowlitz	0	0	0	0	68,450:0
Wahkiakum	0	0	0	0	3,343:0
UPPER COLUMBIA	1	1	100%	0	80,207:1
Chelan	1	1	100%	0	39,222:1
Douglas	0	0	0	0	16,227:0
Okanogan	0	0	0	0	24,758:0

Table 22 Podiatrists (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	2	1	50%	1	166,926:1
Kittitas	0	0	0	0	24,691:0
Yakima	2	1	50%	1	142,235:1
COLUMBIA BASIN	0	0	0	0	61,061:0
Adams	0	0	0	0	11,184:0
Grant	0	0	0	0	40,504:0
Lincoln	0	0	0	0	9,373:0
FOUR RIVERS	2	2	100%	0	44,604:1
Benton	1	1	100%	0	63,716:1
Franklin	1	1	100%	0	25,491:1
NORTH EAST	0	0	0	0	26,219:0
Ferry	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	5,759:0
Stevens	0	0	0	0	16,930:0
SPOKANE	9	9	100%	0	31,453:1
Spokane	9	9	100%	0	31,453:1
SOUTH EAST	0	0	0	0	53,617:0
Asotin	0	0	0	0	13,391:0
Garfield	0	0	0	0	2,791:0
Whitman	0	0	0	0	37,435:0
BLUE MOUNTAIN	1	1	100%	0	45,012:1
Columbia	0	0	0	0	4,290:0
Walla Walla	1	1	100%	0	40,722:1
STATE TOTAL	59	55	91%	4	60,753:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 9 . Distribution by County of Podiatrists Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional

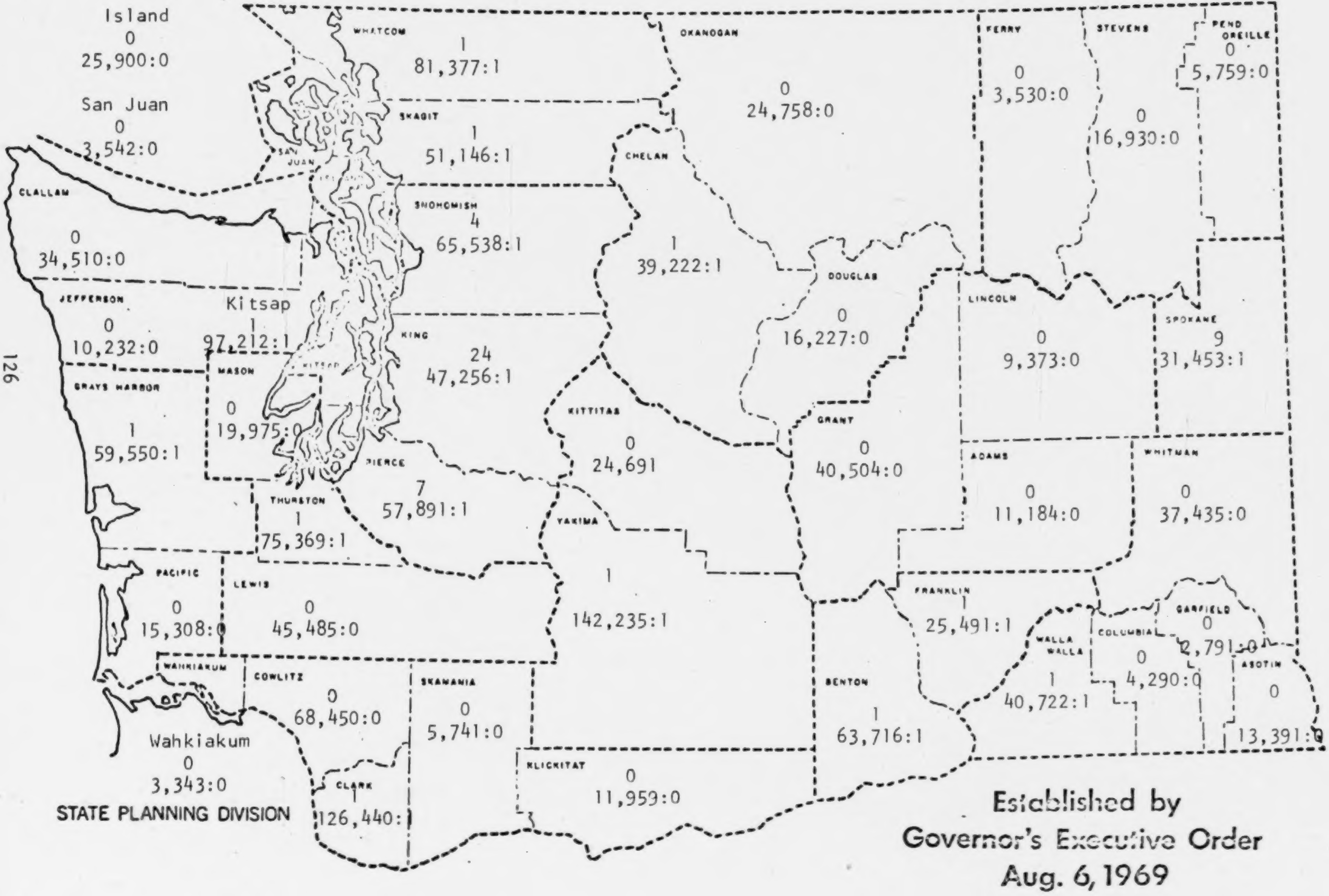

Island
0
25,900:0
San Juan
0
3,542:0
CLALLAM
0
34,510:0
JEFFERSON
0
10,232:0
Kitsap
1
97,212:1
GRAYS HARBOR
1
59,550:1
MASON
0
19,975:0
PACIFIC
0
15,308:0
WAHKIAKUM
Wahkiakum
0
3,343:0
STATE PLANNING DIVISION
WHATCOM
1
81,377:1
SAN JUAN
SKAGIT
1
51,146:1
SNOHOMISH
4
65,538:1
KING
24
47,256:1
KITSAP
PIERCE
7
57,891:1
THURSTON
1
75,369:1
LEWIS
0
45,485:0
COWLITZ
0
68,450:0
CLARK
1
126,440:1
SKAMANIA
0
5,741:0
OKANOGAN
0
24,758:0
CHELAN
1
39,222:1
KITTITAS
0
24,691
YAKIMA
1
142,235:1
KLICKITAT
0
11,959:0
DOUGLAS
0
16,227:0
GRANT
0
40,504:0
BENTON
1
63,716:1
FERRY
0
3,530:0
STEVENS
0
16,930:0
PEND OREILLE
0
5,759:0
LINCOLN
0
9,373:0
SPOKANE
9
31,453:1
ADAMS
0
11,184:0
WHITMAN
0
37,435:0
FRANKLIN
1
25,491:1
WALLA WALLA
1
40,722:1
COLUMBIA
0
4,290:0
GARFIELD
0
2,791:0
ASOTIN
0
13,391:0
Established by
Governor's Executive Order
Aug. 6, 1969

Table 23 Information on Chiropody and Podiatry Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	0	42,460:0	0	44,000:0	0	44,742:0
Clallam	0	32,780:0	0	33,500:0	0	34,510:0
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	1	76,071:1	1	79,100:1	1	74,858:1
Grays Harbor	1	60,218:1	1	62,500:1	1	59,550:1
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	2	81,399:1	3	56,900:1	3	53,988:1
Island	0	24,044:0	0	24,700:0	0	25,900:0
San Juan	0	2,961:0	1	3,400:1	1	3,542:1
Skagit	1	54,001:1	1	55,000:1	1	51,156:1
Whatcom	1	81,791:1	1	87,600:1	1	81,337:1
CENTRAL PUGET SOUND	36	50,032:1	28	66,957:1	41	46,311:1
King	24	45,220:1	21	53,300:1	27	42,005:1
Kitsap	2	48,179:1	1	102,800:1	1	97,212:1
Pierce	7	55,270:1	3	131,167:1	8	52,654:1
Snohomish	3	77,554:1	3	86,400:1	5	52,430:1
SOUTH PUGET SOUND	1	132,690:1	1	144,400:1	1	139,829:1
Lewis	0	47,696:0	0	48,500:0	0	44,485:0
Mason	0	18,287:0	0	20,700:0	0	19,975:0
Thurston	1	66,707:1	1	75,200:1	1	75,369:1
LOWER COLUMBIA	1	136,433:1	1	151,900:1	1	144,146:1
Clark	1	116,815:1	1	131,900:1	1	126,446:1
Klickitat	0	13,636:0	0	13,300:0	0	11,959:0
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	1	72,921:1	0	77,300:0	1	71,793:1
Cowlitz	1	69,150:1	0	73,100:0	1	68,450:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0
UPPER COLUMBIA	1	87,375:1	1	89,800:1	1	80,207:1
Chelan	1	42,891:1	1	43,300:1	1	39,222:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	0	27,601:0	0	27,500:0	0	24,758:0

Table 23 Podiatrists (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	3	61,036:1	1	185,300:1	3	55,642:1
Kittitas	0	22,949:0	0	25,300:0	0	24,691:1
Yakima	3	53,386:1	1	160,000:1	3	47,412:1
COLUMBIA BASIN	0	65,798:0	0	66,330:0	0	61,061:0
Adams	0	11,791:0	0	12,000:0	0	11,184:0
Grant	0	43,381:0	0	44,130:0	0	40,504:0
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	2	49,538:1	1	100,500:1	2	44,604:1
Benton	1	71,590:1	0	72,800:0	1	73,716:1
Franklin	1	27,485:1	1	27,700:1	1	25,491:1
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	10	29,998:1	6	50,000:1	9	31,453:1
Spokane	10	29,998:1	6	50,000:1	9	31,453:1
SOUTH EAST	0	53,202:0	1	54,900:1	1	53,617:1
Asotin	0	14,435:0	1	14,800:1	1	13,391:1
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	0	35,463:0	0	36,400:0	0	37,435:0
BLUE MOUNTAIN	1	50,610:1	1	49,900:1	1	45,012:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	1	45,605:1	1	44,900:1	1	40,722:1
Unknown	0		1		0	
STATE TOTAL	59	55,804:1	46	74,290:1	65	51,405:1

REFERENCES

1. LAW DEFINING AND REGULATING THE PRACTICE OF CHIROPODY, 1967. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. FOOT CARE IN THE STATE OF WASHINGTON, May 1969. Washington State Podiatry Association, P.O. Box 1065, Seattle, WA 98010

3. YOUR CAREER IN PODIATRY (no date). California College of Podiatric Medicine, 1770 Eddy, San Francisco, CA 94115

4. PODIATRY SERVICES AT CLINICS OF A LOCAL HEALTH DEPARTMENT: Experiences of District of Columbia, 1967. U.S. Public Health Reports, 82: Pp. 389-394

5. PODIATRISTS LICENSED IN WASHINGTON, May 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCES

HEALTH MANPOWER, UNITED STATES, 1965-67. Vital and Health Statistics, Data on National Health Resources, Series 14, No. 1. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 Pp. 26-32

HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

RESPONSIBILITIES IN COMPREHENSIVE HEALTH CARE--The Role of the Podiatry College, 1969. Journal of the American Podiatry Association, 59: Pp.11-14.

SURVEY OF THE PODIATRY PROFESSION for 1964,; 1965.Journal of the American Podiatry Association, 55: Pp. 201-208

PSYCHOLOGIST

Licensing Regulations

The following legal description of psychologist is a summary from the law regulating the practice of psychology in Washington State.(1)

Scope of Licensee's Functions

The practice of psychology means the application of established principles of learning, motivation, perception and emotional relationships to problems of evaluation, group relations and behavior adjustment, including but not limited to counseling and guidance, the use of psychotherapeutic techniques and measuring and testing of personality, intelligence, apptitudes, emotions, public opinion, attitudes and skills. Not included are the teaching of psychology principles for accredited educational institutions or the conduct of research into problems of human and animal behavior.

Educational Prerequisites

An applicant for a license as psychologist must submit proof that he holds a doctoral degree from an accredited institution of higher learning with adequate major in psychology and has had at least one year of experience practicing psychology under qualified supervision.

Certificates of qualification will be issued by the board to applicants who meet all the licensing requirements except the possession of the degree of Doctor of Philosophy or its equivalent in psychology from an accredited educational institution. Such certificates certify that the holder has been examined by the board and is deemed competent to perform certain functions within the practice of psychology under the periodic direct supervision of a licensed psychologist.

Reciprocity

An applicant who holds a properly accredited doctoral degree with emphasis in psychology, is licensed to practice psychology in another state for at least two years and is a diplomat(e) in good standing of the American Board of Examiners in Professional Psychology, may be granted a license without written or oral examination, provided he has not previously failed any examination held by the board of psychology of the State of Washington.

PROFESSIONAL FUNCTIONS

Direct quotation and summary statements are taken from "Mental Health Manpower Trends."(2)

"Psychology usually is defined as that branch of science concerned with the study of behavior. Psychology occupies a position somewhere between the natural sciences and the social sciences and often is classified administratively into one or the other of these areas . . ."

"Probably the unique contribution of the psychologist has been his acquisition and use of research skills in exploring the dimensions of human behavior."

From major employment in higher educational institutions, area of applied psychology has seen a rapid growth within the last 25 years.

"Large numbers of psychologists in recent years have been employed by Federal, State and local governments, by schools, by private industry, and by hospitals and clinics. One-third to one-half of all psychologists in the United States are employed in clinical psychology . . . The clinical psychologist engages in diagnostic testing, in counseling and psychotherapy, and in research in the field of mental disorder. Generally he works with professional members of other mental health disciplines in settings where the skills of the various groups can be brought to bear in a team approach."

Advanced training in a graduate school is required for most kinds of professional employment in psychology. Of all of the employed psychologists in the country, fewer than 5% hold less than a master's degree. The Ph.D. degree has become a prerequisite for most careers in psychology . . ."

The American Board of Examiners in Professional Psychology, as a certification body, has established procedures for the examination and evaluation of psychologists who meet certain rigorous training and experience requirements. Those who pass the examination are given a diploma which indicates competence in an area of applied psychology.

The following data are based on renewal of licensing information. No Health Manpower Project survey has been conducted on the profession. Because of limitation in time and the size of the Health Manpower Project staff, selection among the many health professions had to be made. A general resource is available on mental health manpower and that field was deferred for study at a later date.(3)

Table 24 Information on Psychologists Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	2	21,230:1	1	44,000:1	0	44,742:0
Clallam	1	32,780:1	1	33,500:1	0	34,510:0
Jefferson	1	9,680:1	0	10,500:0	0	10,232:0
SOUTH COAST	1	76,071:1	2	39,550:1	1	74,858:1
Grays Harbor	1	60,218:1	2	31,250:1	1	59,550:1
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	10	16,280:1	12	14,225:1	15	10,798:1
Island	0	24,044:0	0	24,700:0	0	25,900:0
San Juan	0	2,961:0	0	3,400:0	0	3,542:0
Skagit	1	54,001:1	1	55,000:1	1	51,146:1
Whatcom	9	9,088:1	11	7,964:1	14	5,813:1
CENTRAL PUGET SOUND	158	11,400:1	166	11,294:1	174	10,912:1
King	109	9,957:1	112	9,994:1	124	9,146:1
Kitsap	4	24,089:1	5	20,560:1	5	19,442:1
Pierce	38	9,918:1	37	10,635:1	38	10,664:1
Snohomish	7	33,237:1	9	28,800:1	7	37,450:1
SOUTH PUGET SOUND	2	66,345:1	6	24,067:1	6	23,305:1
Lewis	1	47,696:1	1	48,500:1	1	44,485:1
Mason	0	18,287:0	0	20,700:0	0	19,975:0
Thurston	1	66,707:1	5	15,040:1	5	15,074:1
LOWER COLUMBIA	6	22,739:1	5	30,380:1	6	24,024:1
Clark	6	19,453:1	5	26,380:1	6	21,074:1
Klickitat	0	13,636:0	0	13,300:0	0	11,959:0
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	3	24,307:1	3	25,767:1	2	35,897:1
Cowlitz	3	23,050:1	3	24,367:1	2	34,225:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0
UPPER COLUMBIA	1	87,375:1	1	89,800:1	2	40,104:1
Chelan	1	42,891:1	1	43,300:1	2	19,611:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	0	27,601:0	0	27,500:0	0	24,758:0

Table 24 Psychologists (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	13	14,085:1	14	13,236:1	15	11,128:1
Kittitas	10	2,295:1	11	2,300:1	12	2,058:1
Yakima	3	53,386:1	3	53,333:1	3	47,412:1
COLUMBIA BASIN	0	65,798:0	0	66,330:0	0	61,061:0
Adams	0	11,791:0	0	12,000:0	0	11,184:0
Grant	0	43,381:0	0	44,130:0	0	40,504:0
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	1	99,075:1	1	100,500:1	1	89,207:1
Benton	1	71,590:1	1	72,800:1	1	63,716:1
Franklin	0	27,485:0	0	27,700:0	0	25,491:0
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	17	13,528:1	15	200,000:1	18	15,727:1
Spokane	17	13,528:1	15	200,000:1	18	15,727:1
SOUTH EAST	14	3,800:1	17	3,229:1	16	3,351:1
Asotin	0	14,435:0	0	14,800:0	0	13,391:0
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	14	2,533:1	17	2,141:1	16	2,340:1
BLUE MOUNTAIN	2	25,305:1	2	24,950:1	3	15,004:1
Columbia	0	5,005:1	0	5,000:0	0	4,290:0
Walla Walla	2	22,803:1	2	22,450:1	3	13,574:1
Unknown	5		6		3	
STATE TOTAL	235	14,010:1	248	13,780:1	262	12,753:1

REFERENCES

1. AN ACT RELATING TO PSYCHOLOGIST, Revised, 1965. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. MENTAL HEALTH MANPOWER TRENDS, George W. Albee, Monograph Series No. 3. 1959. Joint Commission on Mental Illness and Mental Health, Basic Books, Inc. Pp. 114, 120-123

3. MENTAL HEALTH MANPOWER - A general resource is available on mental health manpower.

REGISTERED NURSE

Licensing Regulations

The following legal description of registered nurses is a summary from the law regulating the practice of registered nurses in Washington State.(1)

Scope of Licensee's Functions

The practice of professional (i.e. registered) nursing means the performance for compensation of any act in the observation, care and counsel of the ill, injured, or infirmed, or in the maintenance of health or prevention of illness of others, or in the supervision and teaching of other personnel, or the administration of medications and treatments as prescribed by a licensed physician, osteopathic physician and surgeon, dentist, or chiropodist; requiring substantial specialized judgment and skill and based on knowledge and application of the principles of biological, physical, and social sciense. The foregoing shall not be deemed to include acts of diagnosis or prescription of therapeutic or corrective measures.

Educational Prerequisites

A licensed registered nurse must (a) have completed at least an approved high school course of study or the equivalent thereof as determined by the board and shall meet such other preliminary qualification requirements as the Washington State board of nurses shall prescribe, and (b) have completed the basic professional curriculum in an accredited school of nursing and have been issued a diploma therefrom.

To be a licensed registered nurse in Washington, a person must pass a written examination and an oral or practical examination.

Reciprocity

The director of licenses after approval by the board, written application and evidence of qualification, may issue a license to practice nursing as a registered professional nurse without examination, to an applicant who has been duly licensed or registered as a registered nurse by examination under the laws of another state, territory or foreign country, if in the opinion of the board the applicant meets or at the time of graduation met the qualifications required of registered professional nurses in this state.

PROFESSIONAL FUNCTIONS

The registered nurse is actively concerned with direct and preventive health care. She also participates indirectly in nursing care through advice, guidance, and supervision of other nursing personnel. Nursing involves skilled and sensitive administration of technical aspects of therapy, blended with knowledge of psychological, physiological, cultural, and sociological aspects of the care treatment process.

Registered nurses function in a variety of positions within different health care settings: in hospitals, extended care facilities, nursing homes, medical clinics, nursing clinics, physicians' offices, official and voluntary community health agencies, schools, industry, military services, and in the patients' homes. They coordinate and administer patient care directly and indirectly at varying levels of the organizational structure of these settings. The role may be a collaborative one. Registered professional nurses also serve as nurse educators in collegiate and non-collegiate programs, as researchers, as administrators and as consultants concerning health care and its delivery.

The professional role of a nurse is frequently dependent on which one of the following three types of basic nursing education she has received: associate arts degree, nursing diploma, or baccalaureate degree. Advanced and specialized experience and education, usually at the graduate level, prepares the nurse to function as a clinician or nurse specialist.

The American Association of Deans of College and University Schools of nursing identified specific functions as those "within the competence and jurisdiction of the nurse professional whose minimal preparation has been at the baccalaureate level." While such functions include the supervision and care of patients expected of all nurses, special emphasis is given to preventive care, medical research and coordination with other health professionals.(2)

1. Systematic gathering relevant health, illness, and social data about individuals and families, including identification and assessment of physical and behavioral deviations from "normal" functioning of human beings at all age levels, and assuring their entrance into the health care system.

2. Maintenance and promotion of health.

3. Guidance and surveillance of the health practices of people of all ages with regard to physiological, psychological and social processes, including institution of measures to prevent illness, and initiation of therapeutic regimens.

4. Sustaining, supporting, and caring for persons of all ages and assisting them to cope with actual or perceived threats to health and well-being, during life crises, diagnoses, and therapies.

5. Caring for persons during temporary or permanent period of dependence due to genetic failures, illness, injury, infirmity, and deprivation--to maintain functions essential to their life and productivity.

6. Instituting and supervising the rehabilitation and restoration of persons needing long-term, therapeutic regimens.

7. Coordinating care regimens of patients undergoing therapies and restorative services in collaboration with other health professionals.

Licensure requirements are the same for all applicants for registration as a professional nurse. Basic education preparation varies from associate arts (usually two years), diploma (usually 30 to 36 months), to baccalaureate (4 to 5 years). Diploma and associate arts graduates may enter a supplementary registered nurse baccalaureate program to qualify for that degree. Advanced nursing education is available at master's, post-master's, and doctoral levels.

THE HEALTH MANPOWER PROJECT SURVEY

All 25,865 professional nurses licensed in Washington State as of October, 1970 were surveyed. Ninety-one percent (23,503) returned the questionnaires with the renewal of license forms. Eighty percent (18,905) of the respondents were residing in the State of Washington, distributed throughout the 39 counties. One percent (167) did not specify their county of residence.

Sixty-nine percent (13,056) stated that they were employed, 30% (5,746) were not employed, and less than 1% (103) did not supply the information on their employment status. Forty-seven percent (8,840) of those residing in the state held full-time employment, 22% (4,216) worked part-time.

The educational background was reported in two sections. First, the basic nursing preparation was indicated: 66% had graduated from a diploma program, 5% held an associate degree, and 17% held a baccalaureate. Twelve percent did not respond to that question. Information on the highest degree held included details on education which had been obtained subsequent to the basic nursing education. Eighteen percent reported a baccalaureate in nursing, 2% a baccalaureate in another field, 3% a Master's in nursing, less than 1% a Master's in another field, and fewer than 1% held a Ph.D. Forty percent had not obtained a degree from a college of higher education. Thirty-seven percent did not reply to the question.

The following table and figure contain information on geographic distribution of registered nurses residing in the State of Washington. Their active participation in the labor force is indicated. Ratios of population to actively employed registered nurses were calculated. Respondents who did not specify their employment status were omitted from the tabulation.

Table 25 Registered Nurses Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active		Inactive	Ratio of Persons Per Active Professional
		Number	%		
NORTH COAST	223	148	66%	75	302:1
Clallam	176	117	66%	59	295:1
Jefferson	47	31	66%	16	330:1
SOUTH COAST	251	185	74%	66	405:1
Grays Harbor	194	141	73%	53	422:1
Pacific	57	44	77%	13	348:1
NORTH PUGET SOUND	862	611	71%	251	265:1
Island	108	62	57%	46	418:1
San Juan	18	11	61%	7	322:1
Skagit	311	239	77%	72	214:1
Whatcom	425	299	70%	126	272:1
CENTRAL PUGET SOUND	11,529	7,956	69%	3,573	239:1
King	7,777	5,355	69%	2,422	212:1
Kitsap	465	309	66%	156	315:1
Pierce	1,964	1,361	69%	603	298:1
Snohomish	1,323	931	70%	392	282:1
SOUTH PUGET SOUND	603	399	66%	204	350:1
Lewis	144	102	71%	42	436:1
Mason	88	55	62%	33	363:1
Thurston	371	242	65%	129	311:1
LOWER COLUMBIA	679	491	72%	188	294:1
Clark	633	461	73%	172	274:1
Klickitat	29	23	79%	6	520:1
Skamania	17	7	41%	10	820:1
COWLITZ-WAHKIAKUM	237	194	82%	43	370:1
Cowlitz	231	188	81%	43	364:1
Wahkiakum	6	6	100%	0	557:1
UPPER COLUMBIA	349	236	68%	113	340:1
Chelan	197	129	65%	68	304:1
Douglas	65	48	74%	17	338:1
Okanogan	87	59	68%	28	420:1

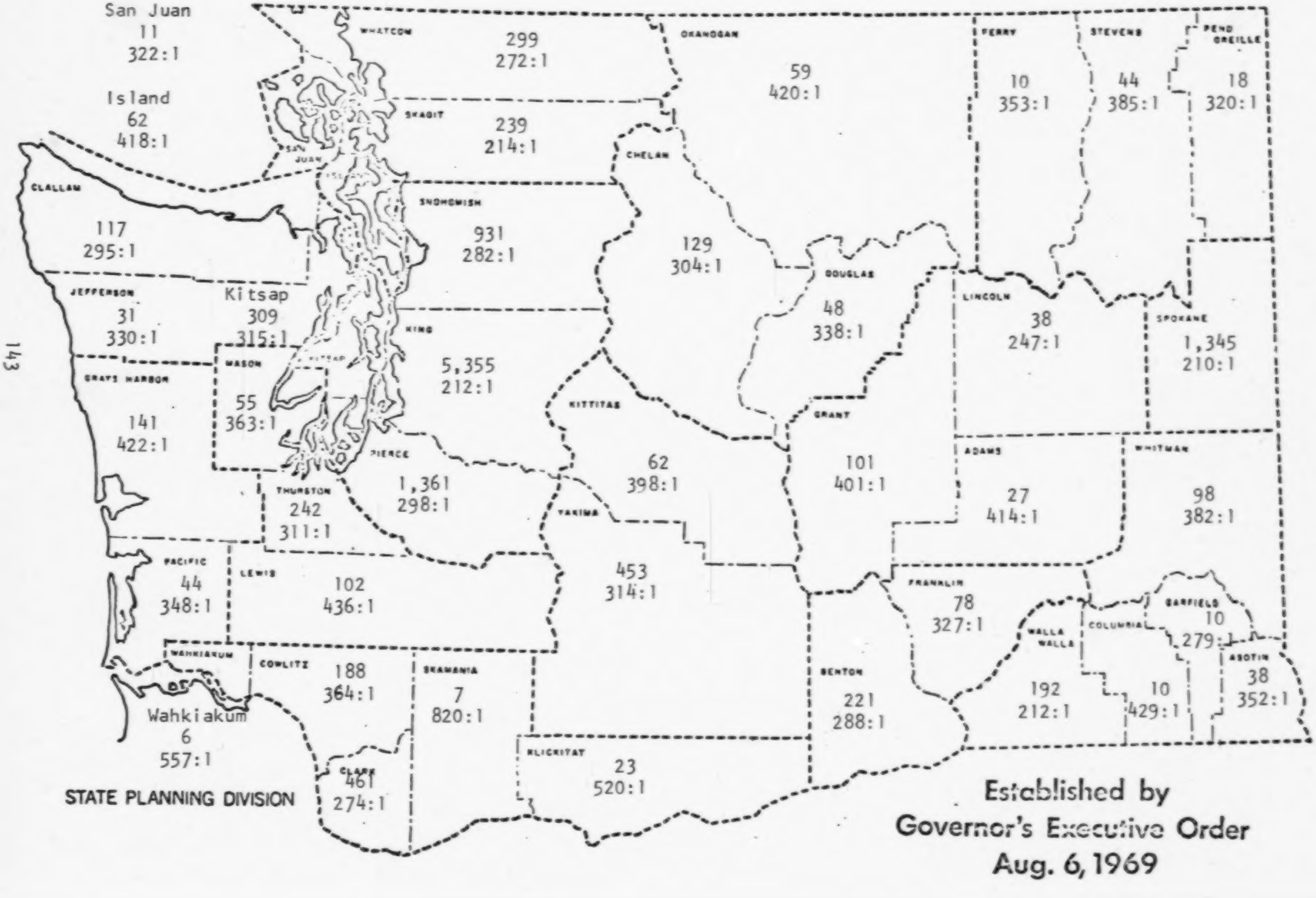
Table 25 Registered Nurses (Continued)

Planning Region and County	Number Residing	Professionally Active Number	%	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	714	515	72%	199	324:1
Kittitas	94	62	66%	32	398:1
Yakima	620	453	73%	167	314:1
COLUMBIA BASIN	235	166	86%	69	368:1
Adams	41	27	66%	14	414:1
Grant	145	101	70%	44	401:1
Lincoln	49	38	78%	11	247:1
FOUR RIVERS	459	299	65%	160	298:1
Benton	338	221	65%	117	288:1
Franklin	121	78	64%	43	327:1
NORTH EAST	100	72	72%	28	364:1
Ferry	12	10	83%	2	353:1
Pend Oreille	23	18	78%	5	320:1
Stevens	65	44	68%	21	385:1
SPOKANE	1,858	1,345	72%	513	210:1
Spokane	1,858	1,345	72%	513	210:1
SOUTH EAST	236	146	62%	90	367:1
Asotin	54	38	70%	16	352:1
Garfield	13	10	77%	3	279:1
Whitman	169	98	58%	71	382:1
BLUE MOUNTAIN	303	202	67%	101	223:1
Columbia	15	10	67%	5	429:1
Walla Walla	288	192	67%	96	212:1
STATE TOTAL	18,638	12,965	70%	5,673	258:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 10 Distribution by County of Registered Nurses Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


San Juan
11
322:1
Island
62
418:1
WHATCOM
299
272:1
SKAGIT
239
214:1
SAN JUAN
ISLAND
CLALLAM
117
295:1
JEFFERSON
31
330:1
Kitsap
309
315:1
KITSAP
MASON
55
363:1
GRAYS HARBOR
141
422:1
SNOHOMISH
931
282:1
KING
5,355
212:1
PIERCE
1,361
298:1
THURSTON
242
311:1
PACIFIC
44
348:1
LEWIS
102
436:1
WAHKIAKUM
COWLITZ
188
364:1
Wahkiakum
6
557:1
CLARK
461
274:1
SKAMANIA
7
820:1
OKANOGAN
59
420:1
CHELAN
129
304:1
KITTITAS
62
398:1
YAKIMA
453
314:1
KLICKITAT
23
520:1
DOUGLAS
48
338:1
GRANT
101
401:1
BENTON
221
288:1
FERRY
10
353:1
STEVENS
44
385:1
PEND OREILLE
18
320:1
LINCOLN
38
247:1
SPOKANE
1,345
210:1
ADAMS
27
414:1
WHITMAN
98
382:1
FRANKLIN
78
327:1
WALLA WALLA
192
212:1
COLUMBIA
10
429:1
GARFIELD
10
279:1
ASOTIN
38
352:1

STATE PLANNING DIVISION

Established by
Governor's Executive Order
Aug. 6, 1969

Table 26 Information on Registered Nurses Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	235	181:1	244	180:1	256	175:1
Clallam	190	173:1	189	177:1	198	174:1
Jefferson	45	215:1	55	191:1	58	176:1
SOUTH COAST	283	269:1	280	283:1	295	254:1
Grays Harbor	220	274:1	219	285:1	231	258:1
Pacific	63	252:1	61	272:1	64	225:1
NORTH PUGET SOUND	939	173:1	971	176:1	989	164:1
Island	104	231:1	125	198:1	127	204:1
San Juan	21	141:1	28	121:1	32	111:1
Skagit	351	154:1	358	154:1	358	143:1
Whatcom	463	177:1	460	190:1	472	172:1
CENTRAL PUGET SOUND	11,874	152:1	12,389	151:1	12,896	147:1
King	8,081	134:1	8,391	133:1	8,689	131:1
Kitsap	461	209:1	503	204:1	527	185:1
Pierce	2,064	187:1	2,149	183:1	2,234	181:1
Snohomish	1,268	184:1	1,346	193:1	1,446	181:1
SOUTH PUGET SOUND	606	219:1	659	219:1	698	200:1
Lewis	157	304:1	164	260:1	171	260:1
Mason	94	195:1	97	213:1	102	110:1
Thurston	355	188:1	398	189:1	425	177:1
LOWER COLUMBIA	686	199:1	700	217:1	738	195:1
Clark	627	186:1	649	203:1	687	184:1
Klickitat	44	310:1	35	380:1	35	342:1
Skamania	15	399:1	16	419:1	16	359:1
COWLITZ-WAHKIAKUM	269	271:1	269	287:1	274	262:1
Cowlitz	260	266:1	263	278:1	266	257:1
Wahkiakum	9	419:1	6	700:1	8	418:1
UPPER COLUMBIA	405	216:1	408	220:1	414	194:1
Chelan	249	172:1	247	175:1	244	161:1
Douglas	70	241:1	72	264:1	81	200:1
Okanogan	86	321:1	89	309:1	89	278:1

Table 26 Registered Nurses (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	824	222:1	806	230:1	837	199:1
Kittitas	119	193:1	110	230:1	113	219:1
Yakima	705	227:1	696	230:1	724	197:1
COLUMBIA BASIN	289	228:1	270	246:1	269	227:1
Adams	51	231:1	52	231:1	50	224:1
Grant	167	260:1	157	281:1	158	256:1
Lincoln	71	150:1	61	167:1	61	154:1
FOUR RIVERS	505	196:1	496	203:1	520	172:1
Benton	370	194:1	367	199:1	388	164:1
Franklin	135	204:1	129	215:1	132	193:1
NORTH EAST	118	243:1	112	254:1	115	228:1
Ferry	16	244:1	13	277:1	14	252:1
Pend Oreille	39	185:1	31	210:1	31	186:1
Stevens	63	280:1	68	270:1	70	242:1
SPOKANE	2,030	148:1	2,039	147:1	2,095	135:1
Spokane	2,030	148:1	2,039	147:1	2,095	135:1
SOUTH EAST	258	206:1	264	208:1	270	199:1
Asotin	54	267:1	59	251:1	60	223:1
Garfield	15	220:1	15	247:1	15	186:1
Whitman	189	188:1	190	192:1	195	192:1
BLUE MOUNTAIN	362	140:1	345	145:1	357	126:1
Columbia	19	263:1	20	250:1	18	238:1
Walla Walla	343	133:1	325	138:1	339	120:1
Unknown	127		131		0	
STATE TOTAL	19,810	166:1	20,283	169:1	21,023	169:1

REFERENCES

1. LAW REGULATING THE PRACTICE OF PROFESSIONAL NURSING, 1968. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. AAUD's POSITION ON THE ROLE OF THE PROFESSIONAL NURSE IN OUR SOCIETY, American Association of Deans of College and University Schools of Nursing.

3. REPORT ON PROFESSIONAL REGISTERED NURSES LICENSING IN WASHINGTON, March 1969. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Bldg., Seattle, WA 98104

ADDITIONAL REFERENCES

COMMUNICATION OF GOALS, PRIORITIES AND MEANS OF THE AMERICAN ASSOCIATION OF DEANS OF COLLEGES AND UNIVERSITY SCHOOLS OF NURSING: MEETING, October 1970, Washington, D.C. American Association of Deans of Colleges and University Schools of Nursing.

FACTS ABOUT NURSING: American Nursing Association, New York, 1968.

NURSING EDUCATION: PHILOSOPHY OF THE SCHOOL OF NURSING AND THE DESCRIPTION OF PROGRAMS. University of Washington Bulletin, 1970-72. Pp. 277-279

NURSE MANPOWER: YESTERDAY, TODAY AND TOMORROW, February 1969. American Journal of Nursing, Pp. 290-291

RECOMMENDATIONS OF THE NATIONAL COMMISSION FOR THE STUDY OF NURSING AND NURSING EDUCATION, February 1970. American Journal of Nursing, 70:2:279-294

REPORT OF WASHINGTON STATE NURSES ASSOCIATION, Special Education Committee. To be published during 1971, dealing with nursing education--all aspects.

SANIPRACTORS

Sanipractors are licensed in this state. A detailed report is not included in this publication because of the small number. Within the last three years only two members each year have held such license. One has been residing in King County and one in Snohomish County.

SANITARIAN

Licensing Regulations

The following legal description of sanitarians is a summary from the law regulating the practice of sanitarians in Washington State.(1)

Scope of Licensee's Functions

"Sanitarian" is a person who has fitted himself by suitable specialized study in the basic sciences, sanitary sciences, administration, education and the humanities and with suitable experience in the application of the principles of sanitary science to protect the public from the many health hazards resulting from an increasingly complex environment. He applies the principles of sanitary science to the investigation, evaluation and interpretation of environmental health needs in order to secure necessary sanitary improvements in environmental factors such as, but not limited to, milk and food, private water and sewage, vector control, refuse disposal and housing.

Educational Prerequisites

To be a registered sanitarian a person must have been graduated from a college or university recognized by the American Council of Education as qualified to issue a bachelor of science or equivalent degree in public health, sanitary science, bacteriology, dairy science, veterinarian medicine, engineering, or a basic natural or physical science relating to public health sanitation, employed full time as a sanitarian for a period of six months and passed an examination under the supervision of the Washington State Board of Registered Sanitarians.

Reciprocity

The board upon written application together with such references and proof as it may prescribe, shall certify to the director of licenses without examination any person who is registered as a sanitarian under the laws of any other state, the requirements of which for receiving such registration were at the time such registration was issued, equal to the requirements so imposed by this state for registration of sanitarians.

PROFESSIONAL FUNCTIONS

The following description of the sanitarian is based upon a publication of the Civil Service Commission(2) and consultation with experts in the environmental health field. This information adds a further dimension to the legal description.

The sanitarian is involved in planning, administering and evaluating programs concerned with the elimination and prevention of environmental health hazards. Sanitarian positions require a broad knowledge of any one of a combination of the health, agricultural, physical or biological sciences sufficient to understand the basic concepts, methods and techniques of environmental health hazards.

The United States Civil Service Commission classifies the position of sanitarian with further detail:

> "The job of the sanitarian is to:
> --plan and administer projects or programs concerned with eliminating and preventing environmental health hazards. This may also include responsibility for planning or conducting an environmental health education or staff development program;
>
> --develop new (and revise existing) standards, methods and procedures to aid in developing--and maintaining--environmental health programs; or
>
> --evaluate and advise on the operation of environmental health programs administered by representatives of public and private agencies or establishments.
>
> "These functions are typically performed in one or a combination of the following or other comparable environmental health areas:
> --milk and other dairy products
> --food sanitation
> --water supply
> --refuse and other waste control
> --insect and rodent
> --shellfish
> --recreation, housing, care facilities, or other facilities or institutions."

THE HEALTH MANPOWER PROJECT SURVEY

This report was based on a survey of all sanitarians licensed in Washington which was conducted by the Health Manpower Project at the time of license renewals in May, 1969.(3) Ninety-five percent of those renewing their licenses by January 1, 1970 (214) responded to the questionnaire. Ninety-four percent of these respondents lived in Washington State with the majority residing in King, Pierce, Spokane and Thurston Counties. According to the data no sanitarians lived in 11 counties.

Nearly all of the respondents were employed full time in environmental health, 8% were employed in an occupation outside this field. Nearly all were working in public health with the county or district setting most frequently reported. About a third specified that their primary work function was administration and/or supervision, and a fourth reported general field work. Another fourth specified special field work.

About half of the sanitarians were under the age of 45. Seventy percent had earned a baccalaureate degree as their highest educational attainment, usually a bachelor of science degree. The most frequently reported undergraduate majors were the biological sciences and agriculture. Two-thirds had received their undergraduate education from Washington institutions.

The following table and map show the geographic distribution and degree of participation in the labor force, as reported by the 200 respondents to the questionnaire living in Washington.

Table 27 Sanitarians Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active		Inactive	Ratio of Persons Per Active Professional
		Number	%		
NORTH COAST	2	2	100%	0	22,371:1
Clallam	2	2	100%	0	17,255:1
Jefferson	0	0	0	0	10,232:0
SOUTH COAST	3	3	100%	0	24,953:1
Grays Harbor	3	3	100%	0	19,850:1
Pacific	0	0	0	0	15,308:0
NORTH PUGET SOUND	12	11	93%	1	14,724:1
Island	1	1	100%	0	25,900:1
San Juan	1	1	100%	0	3,542:1
Skagit	3	3	100%	0	17,049:1
Whatcom	7	6	86%	1	13,562:1
CENTRAL PUGET SOUND	82	78	95%	4	24,343:1
King	60	58	97%	2	19,554:1
Kitsap	4	2	50%	2	48,606:1
Pierce	13	13	100%	0	31,172:1
Snohomish	5	5	100%	0	52,430:1
SOUTH PUGET SOUND	41	38	93%	3	3,680:1
Lewis	4	3	75%	1	14,828:1
Mason	2	2	100%	0	9,988:1
Thurston	35	33	94%	2	2,284:1
LOWER COLUMBIA	5	4	80%	1	36,037:1
Clark	4	4	100%	0	31,612:1
Klickitat	1	0	0	1	11,959:0
Skamania	0	0	0	0	5,741:0
COWLITZ-WAHKIAKUM	4	4	100%	0	17,948:1
Cowlitz	4	4	100%	0	17,113:1
Wahkiakum	0	0	0	0	3,343:0
UPPER COLUMBIA	5	5	100%	0	16,041:1
Chelan	4	4	100%	0	9,896:1
Douglas	0	0	0	0	16,227:0
Okanogan	1	1	100%	0	24,758:1

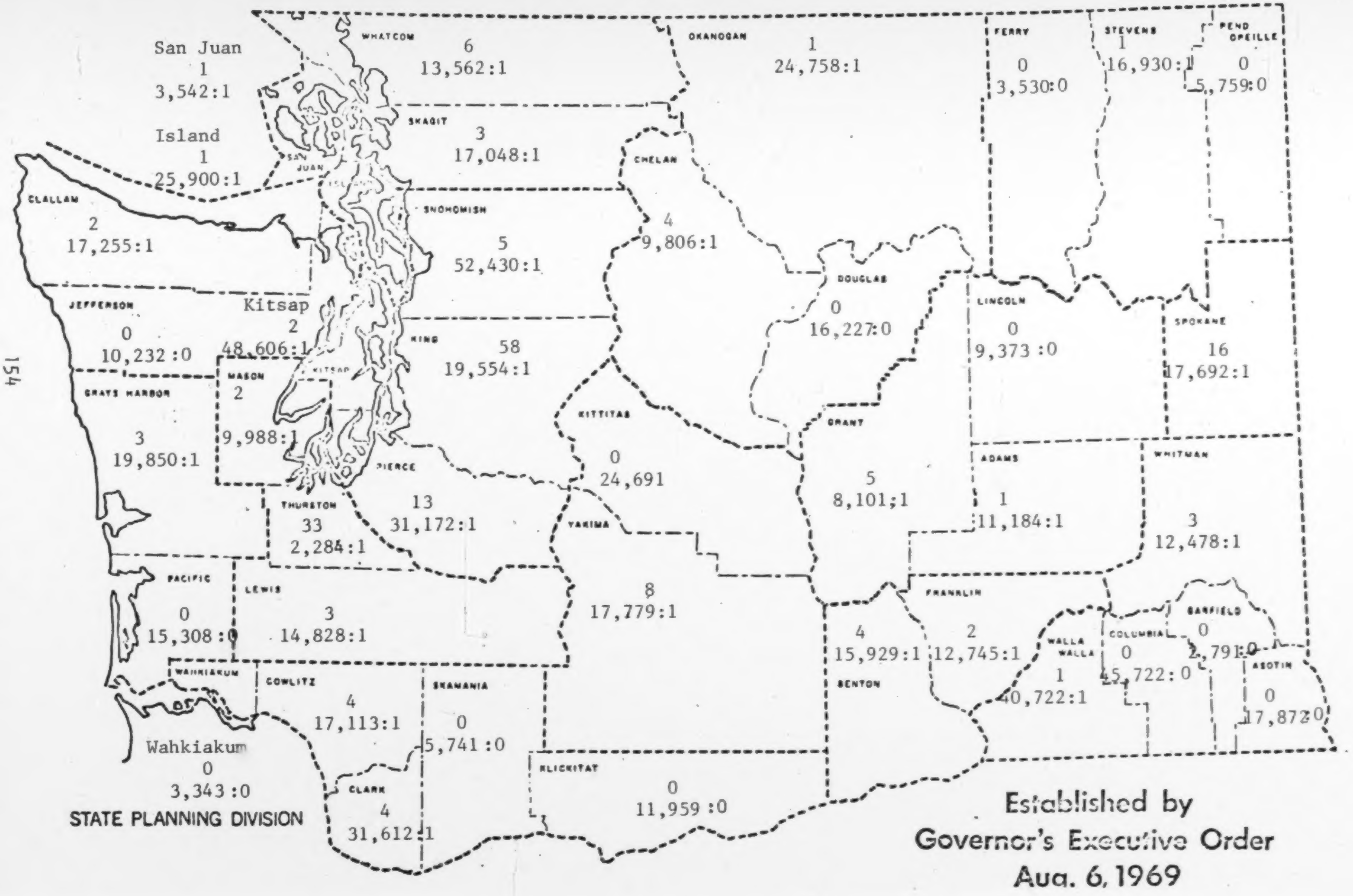
Table 27 Sanitarians (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons Per Active Professional
YAKIMA VALLEY	10	8	80%	2	20,866:1
Kittitas	1	0	0	1	24,691:0
Yakima	9	8	89%	1	17,779:1
COLUMBIA BASIN	6	6	100%	0	10,177:1
Adams	1	1	100%	0	11,184:1
Grant	5	5	100%	0	8,101:1
Lincoln	0	0	0	0	9,373:0
FOUR RIVERS	7	6	86%	1	14,868:1
Benton	5	4	80%	1	15,929:1
Franklin	2	2	100%	0	12,746:1
NORTH EAST	1	1	100%	0	26,219:1
Ferry	0	0	0	0	3,530:0
Pend Oreille	0	0	0	0	5,759:0
Stevens	1	1	100%	0	16,930:1
SPOKANE	17	16	94%	1	17,692:1
Spokane	17	16	94%	1	17,692:1
SOUTH EAST	3	3	100%	0	17,872:1
Asotin	0	0	0	0	13,391:0
Garfield	0	0	0	0	2,791:0
Whitman	3	3	100%	0	12,478:1
BLUE MOUNTAIN	1	1	100%	0	45,021:1
Columbia	0	0	0	0	4,290:0
Walla Walla	1	1	100%	0	40,722:1
STATE TOTAL	200	187	94%	13	17,868:1

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 11 Distribution by County of Licensed Sanitarians Currently Active and Residing In Washington State by Number and Ratio of Population Per Active Professional


San Juan
1
3,542:1
Island
1
25,900:1
WHATCOM
6
13,562:1
OKANOGAN
1
24,758:1
FERRY
0
3,530:0
STEVENS
1
16,930:1
PEND OREILLE
0
5,759:0
SAN JUAN
ISLAND
SKAGIT
3
17,048:1
CHELAN
4
9,806:1
CLALLAM
2
17,255:1
SNOHOMISH
5
52,430:1
DOUGLAS
0
16,227:0
LINCOLN
0
9,373 :0
SPOKANE
16
17,692:1
JEFFERSON
0
10,232 :0
Kitsap
2
48,606:1
KITSAP
KING
58
19,554:1
MASON
2
9,988:1
GRAYS HARBOR
3
19,850:1
KITTITAS
0
24,691
GRANT
5
8,101;1
ADAMS
1
11,184:1
WHITMAN
3
12,478:1
PIERCE
13
31,172:1
THURSTON
33
2,284:1
YAKIMA
8
17,779:1
PACIFIC
0
15,308 :0
LEWIS
3
14,828:1
FRANKLIN
2
12,745:1
BENTON
4
15,929:1
WALLA WALLA
1
40,722:1
COLUMBIA
0
45,722: 0
GARFIELD
0
2,791:0
ASOTIN
0
17,872:0
WAHKIAKUM
COWLITZ
4
17,113:1
SKAMANIA
0
5,741 :0
KLICKITAT
0
11,959 :0
Wahkiakum
0
3,343 :0
CLARK
4
31,612:1
STATE PLANNING DIVISION
Established by
Governor's Executive Order
Aug. 6, 1969

The following data are based on three years of licensing statistics Active licensing status (which does not imply active participation in the labor force) forms the basis of the information.

Table 28 Information on Sanitarians Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	3	14,153:1	3	14,667:1	5	8,948:1
Clallam	3	10,927:1	3	11,167:1	5	6,902:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	0	76,071:0	1	79,100:1	5	14,972:1
Grays Harbor	0	60,218:0	1	62,500:1	5	11,910:1
Pacific	0	15,853:0	0	16,600:0	0	15,308:0
NORTH PUGET SOUND	10	16,280:1	7	24,386:1	17	9,527:1
Island	2	12,002:1	2	12,350:1	2	12,590:1
San Juan	1	2,961:1	1	3,400:1	2	1,771:1
Skagit	3	18,000:1	1	55,000:1	5	10,229:1
Whatcom	4	20,448:1	3	29,200:1	8	10,172:1
CENTRAL PUGET SOUND	57	31,599:1	45	41,662:1	100	18,987:1
King	39	27,828:1	29	38,597:1	69	16,437:1
Kitsap	3	32,119:1	3	34,267:1	4	24,303:1
Pierce	7	55,269:1	8	49,188:1	17	23,838:1
Snohomish	8	29,083:1	5	51,840:1	10	26,215:1
SOUTH PUGET SOUND	25	5,308:1	17	8,494:1	35	3,995:1
Lewis	2	23,848:1	2	24,250:1	3	14,828:1
Mason	2	9,144:1	1	20,700:1	2	9,988:1
Thurston	21	3,177:1	14	5,371:1	30	2,512:1
LOWER COLUMBIA	3	45,478:1	2	75,950:1	5	28,829:1
Clark	2	58,408:1	1	131,900:1	4	31,612:1
Klickitat	1	13,636:1	1	13,300:1	1	11,959:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	3	24,307:1	3	25,767:1	3	23,931:1
Cowlitz	3	23,050:1	3	24,367:1	3	22,817:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0
UPPER COLUMBIA	2	43,688:1	1	89,800:1	4	20,052:1
Chelan	2	21,446:1	1	43,300:1	4	9,806:1
Douglas	0	16,883:0	0	19,000:0	0	16,227:0
Okanogan	0	27,601:0	0	27,500:0	0	24,758:0

Table 28 Sanitarians (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
YAKIMA VALLEY	6	30,518:1	2	92,650:1	11	15,175:1
Kittitas	0	22,949:0	0	25,300:0	1	24,691:1
Yakima	6	26,693:1	2	80,000:1	10	14,224:1
COLUMBIA BASIN	4	16,450:1	3	22,110:1	6	10,177:1
Adams	1	11,791:1	1	12,000:1	1	11,184:1
Grant	3	14,460:1	2	22,065:1	5	8,101:1
Lincoln	0	10,626:0	0	10,200:0	0	9,373:0
FOUR RIVERS	4	24,769:1	4	25,125:1	4	22,302:1
Benton	4	17,898:1	4	18,200:1	4	15,929:1
Franklin	0	27,485:0	0	27,700:0	0	25,491:0
NORTH EAST	0	28,715:0	0	28,400:0	0	26,219:0
Ferry	0	3,898:0	0	3,600:0	0	3,530:0
Pend Oreille	0	7,201:0	0	6,500:0	0	5,759:0
Stevens	0	17,616:0	0	18,300:0	0	16,930:0
SPOKANE	15	19,998:1	14	21,429:1	24	11,795:1
Spokane	15	19,998:1	14	21,429:1	24	11,795:1
SOUTH EAST	6	8,867:1	3	18,300:1	6	8,936:1
Asotin	0	14,435:0	0	14,800:0	0	13,391:0
Garfield	0	3,304:0	0	3,700:0	0	2,791:0
Whitman	6	5,911:1	3	12,133:1	6	6,239:1
BLUE MOUNTAIN	3	16,870:1	3	16,633:1	3	15,004:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	3	15,202:1	3	14,967:1	3	13,574:1
Unknown	4		17		23	
STATE TOTAL	145	22,706:1	125	27,339:1	251	13,312:1

REFERENCES

1. A LAW AND REGULATIONS PERTAINING TO THE PRACTICE OF SANITARIANS, 1959. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. U.S. CIVIL SERVICE COMMISSION, POSITION CLASSIFICATION STANDARDS, SANITARIAN SERIES GS-688 (October 1969)

3. SANITARIANS LICENSED IN WASHINGTON, June 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCES

ANALYSIS OF THE PROFESSIONAL SANITARIAN, Israel Light and Frank A. Butrico. Paper presented at the 26th Annual Educational Conference of the National Association of Sanitarians, Cincinnati, OH, June 1962

HEALTH RESOURCES STATISTICS, 1968. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Chapter 11, Pp. 89-100

PUBLIC HEALTH SANITARIANS, 1963, No. 248. Science Research Associates, Inc.

WASHINGTON STATE BOARD OF REGISTERED SANITARIANS, 1959-67. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

VETERINARY

Licensing Regulations

The following legal description of veterinary medicine is a summary from the law regulating the practice of veterinary medicine in Washington State.(1)

Scope of Licensee's Function

Veterinary medicine, surgery and dentistry is regarded as diagnosis prognosis and treatment of diseases, deformities, defects, wounds or injuries of animals, including the prescription of any drug, medicine, method or preparation or performance of any operations, or applying any apparatus for cure, amelioration, correction ~~or reduction~~ or modification of any animal disease, deformity, defect, wound or injury, or any manual procedure for the diagnosis of pregnancy, sterility or infertility upon livestock.

Educational Prerequisites

An applicant for license to practice veterinary medicine, surgery, and dentistry must show that he has obtained a diploma from some legally chartered veterinary college or veterinary department of any university or agricultural college, recognized by the American Veterinary Medical Association, which evidences the fact that applicant has been in attendance for a period of at least four academic years of thirty-two to thirty-six weeks.

Reciprocity

Any person who has been lawfully licensed to practice veterinary medicine, surgery, and dentistry in another state or territory which has and maintains a standard for the practice of veterinary medicine, surgery and dentistry which is substantially the same as that maintained in this state, and who has been lawfully and continuously engaged in the practice of veterinary medicine, surgery and dentistry for two years or more immediately before filing his application to practice in this state and who shall submit to the director a duly attested certificate from the examining board of the state or territory in which he is registered, certifying to the fact of his registration and of his being a person of good moral character and of professional attainments, may upon the payment of the fee as provided herein, be granted a license to practice veterinary medicine, surgery and dentistry in this state, without being required to take an examination. Provided, however, that no license shall be issued to any applicant unless the state or territory from which such certificate has been granted to such applicant shall have extended a like privilege to engage in the practice of veterinary medicine, surgery and dentistry within its own borders to veterinarians heretofore and hereafter licensed by this state, and removing to such other state: and provided further, that the director of licenses shall have power to enter into reciprocal relations with other states whose requirements are substantially the same as those provided herein.

PROFESSIONAL FUNCTIONS

The following direct quotation from a publication of the Washington State Veterinary Medical Association clearly states the relation of veterinary medicine to health:

> "Every veterinarian is, in the broadest sense, a public health veterinarian. He is a member of the public health team, formally or informally, for it is his duty not only to protect animals from specific animal diseases but also to protect the human world from the diseases afflicting the animal world." (2)

HEALTH MANPOWER PROJECT SURVEY

This report was based on a survey conducted of all veterinarians licensed in May, 1969, (3) At that time questionnaires were mailed with license renewals and by November, 1969, 95% of those who had renewed their license (859) had returned their questionnaires.

Only 53% of those licensed in Washington actually lived in the state, and about half of the Washington residents lived in urban areas. Twenty nine percent of the veterinarians resided in King County proper. Three fourths were engaged in private practice of veterinary medicine, the rest in such fields as regulatory veterinary medicine and public health. Treatment of small animals rather than large was predominant. Four percent were retired from practice. A wide range of hours in a typical work week was reported; 21% specified a work week of 56-60 hours.

Three fourths of the respondents received their professional veterinary degrees from Washington State University in Pullman; nearly two-thirds reported an additional degree, usually a bachelor of science. Comparisons of out of state with in-state residents indicated that licensed veterinarians living outside Washington were more often younger.

The following table and map give information on geographic distribution and active participation in the labor force. Ratios of population and professionals were omitted because this information seemed inappropriate for a profession dealing directly with animals as well as human beings. This point of view might be challenged by those veterinarians who formulated the introductory statement concerning the profession, but is based on survey statistics which showed that three fourths of the respondents were engaged in private practice and only 14% in public health and diverse regulatory professional activities.

Table 29 Veterinarians Licensed In and Residing In Washington State by Participation in the Labor Force

Planning Region and County	Number Residing	Professionally Active		Inactive	Ratio of Persons Per Active Professional
		Number	%		
NORTH COAST	6	5	83%	1	Not Applicable
Clallam	6	5	83%	1	
Jefferson	0	0	0	0	
SOUTH COAST	10	9	90%	1	
Grays Harbor	7	6	86%	1	
Pacific	3	3	100%	0	
NORTH PUGET SOUND	31	27	87%	4	
Island	4	3	75%	1	
San Juan	1	1	100%	0	
Skagit	12	10	83%	2	
Whatcom	14	13	93%	1	
CENTRAL PUGET SOUND	211	196	93%	15	
King	129	119	92%	10	
Kitsap	8	8	100%	0	
Pierce	40	37	92%	3	
Snohomish	34	32	94%	2	
SOUTH PUGET SOUND	29	24	83%	5	
Lewis	9	8	88%	1	
Mason	2	2	100%	0	
Thurston	18	14	78%	4	
LOWER COLUMBIA	15	15	100%	0	
Clark	12	12	100%	0	
Klickitat	3	3	100%	0	
Skamania	0	0	0	0	
COWLITZ-WAHKIAKUM	11	9	82%	2	
Cowlitz	9	7	78%	2	
Wahkiakum	2	2	100%	0	
UPPER COLUMBIA	9	9	100%	0	
Chelan	5	5	100%	0	
Douglas	1	1	100%	0	
Okanogan	3	3	100%	0	

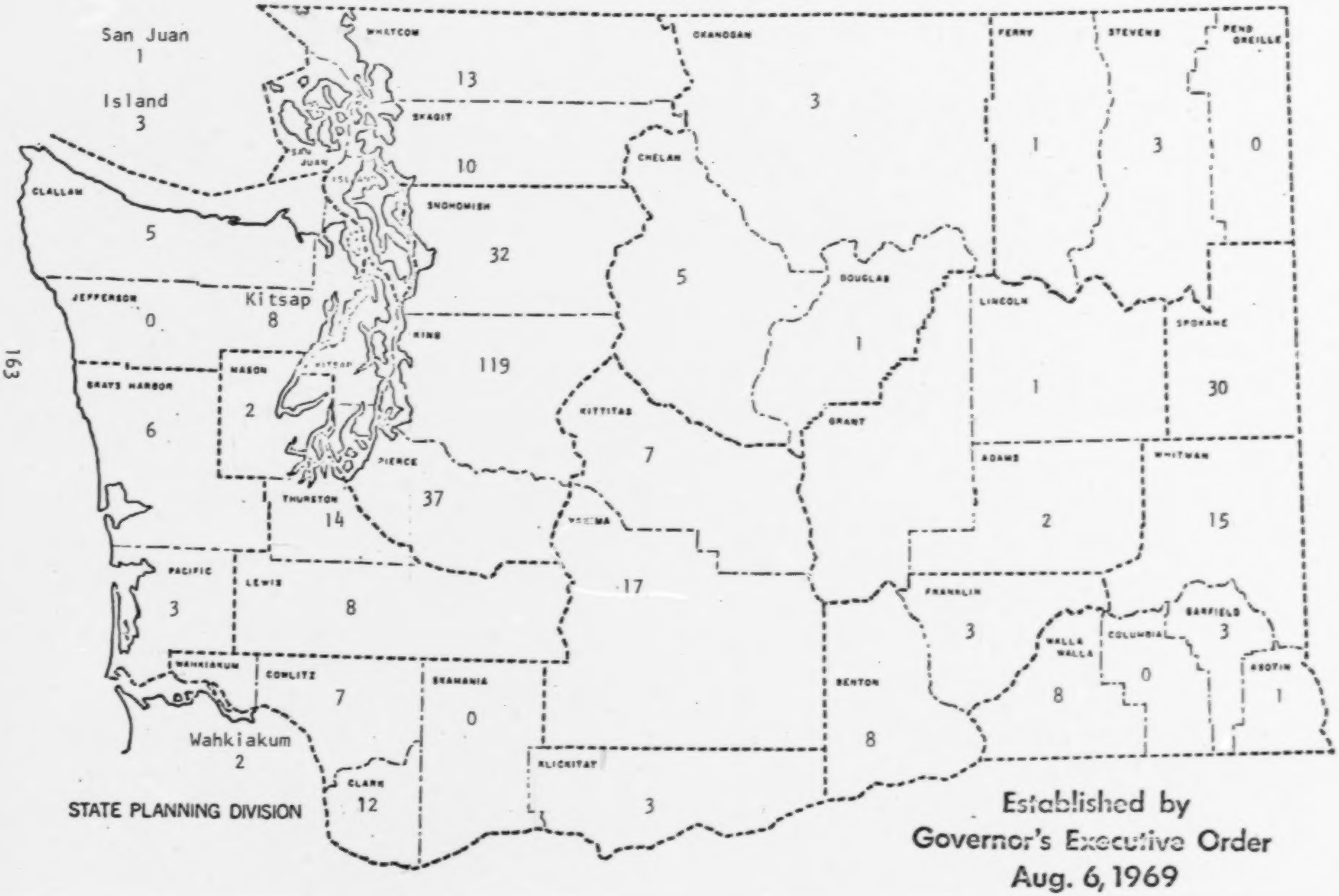
Table 29 Veterinarians (Continued)

Planning Region and County	Number Residing	Professionally Active Number	Professionally Active %	Inactive	Ratio of Persons per Active Professional
YAKIMA VALLEY	26	24	92%	1	Not Applicable
Kittitas	9	7	78%	1	
Yakima	17	17	100%	0	
COLUMBIA BASIN	11	9	82%	2	
Adams	2	2	100%	0	
Grant	6	6	100%	0	
Lincoln	3	1	33%	2	
FOUR RIVERS	14	11	79%	3	
Benton	11	8	73%	3	
Franklin	3	3	100%	0	
NORTH EAST	4	4	100%	0	
Ferry	1	1	100%	0	
Pend Oreille	0	0	0	0	
Stevens	3	3	100%	0	
SPOKANE	35	30	86%	5	
Spokane	35	30	86%	5	
SOUTH EAST	23	19	83%	4	
Asotin	1	1	100%	0	
Garfield	4	3	75%	1	
Whitman	18	15	83%	3	
BLUE MOUNTAIN	8	8	100%	0	
Columbia	0	0	0	0	
Walla Walla	8	8	100%	0	
STATE TOTAL	456	413	90%	53	

1. Data derived from a survey conducted by the Health Manpower Project

2. See paragraph on methodology in introductory chapter for explanation of state totals.

Figure 12 Distribution by County of Veterinarians Currently Active and Residing In Washington State by Number


San Juan
1
Island
3
WHATCOM
13
SKAGIT
10
SAN JUAN
ISLAND
CLALLAM
5
JEFFERSON
0
Kitsap
8
KITSAP
SNOHOMISH
32
KING
119
MASON
2
GRAYS HARBOR
6
PIERCE
37
THURSTON
14
PACIFIC
3
LEWIS
8
WAHKIAKUM
COWLITZ
7
SKAMANIA
0
Wahkiakum
2
CLARK
12
STATE PLANNING DIVISION
OKANOGAN
3
CHELAN
5
KITTITAS
7
YAKIMA
17
KLICKITAT
3
DOUGLAS
1
GRANT
BENTON
8
FERRY
1
STEVENS
3
PEND OREILLE
0
LINCOLN
1
SPOKANE
30
ADAMS
2
WHITMAN
15
FRANKLIN
3
WALLA WALLA
8
COLUMBIA
0
GARFIELD
3
ASOTIN
1
Established by
Governor's Executive Order
Aug. 6, 1969

Licensing Data

The following data are based on the past three years licensing information concerning veterinarians holding active licensing status. Although ratios of persons in the population per veterinarian were omitted in the survey data, they were included in the licensing statistics for possible comparisons of overall information.

Table 30 Information on Veterinarians Derived from Figures Gathered by the Division of Professional Licensing at Time of Licensure Renewal

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
NORTH COAST	7	6,066:1	6	7,333:1	6	7,457:1
Clallam	7	4,683:1	6	5,583:1	6	5,752:1
Jefferson	0	9,680:0	0	10,500:0	0	10,232:0
SOUTH COAST	10	7,607:1	11	7,191:1	9	8,318:1
Grays Harbor	8	7,527:1	7	8,929:1	7	8,507:1
Pacific	2	7,927:1	4	4,150:1	2	7,654:1
NORTH PUGET SOUND	33	4,933:1	34	5,021:1	36	4,499:1
Island	1	24,044:1	3	8,233:1	4	6,475:1
San Juan	1	2,961:1	1	3,400:1	1	3,542:1
Skagit	13	4,154:1	13	4,231:1	14	3,653:1
Whatcom	18	4,544:1	17	5,153:1	17	4,787:1
CENTRAL PUGET SOUND	204	8,829:1	257	7,295:1	258	7,360:1
King	122	8,896:1	160	6,996:1	158	7,178:1
Kitsap	8	12,045:1	11	9,346:1	11	8,838:1
Pierce	42	9,212:1	45	8,744:1	47	8,622:1
Snohomish	32	7,271:1	41	6,322:1	42	6,242:1
SOUTH PUGET SOUND	27	4,914:1	31	4,658:1	32	4,370:1
Lewis	7	6,814:1	8	6,063:1	8	5,561:1
Mason	4	4,572:1	2	10,350:1	2	9,988:1
Thurston	16	4,169:1	21	3,581:1	22	3,426:1
LOWER COLUMBIA	16	8,527:1	18	8,439:1	18	8,008:1
Clark	13	8,986:1	14	9,421:1	14	9,032:1
Klickitat	3	4,545:1	4	3,325:1	4	2,990:1
Skamania	0	5,982:0	0	6,700:0	0	5,741:0
COWLITZ-WAHKIAKUM	9	8,102:1	9	8,589:1	8	8,974:1
Cowlitz	9	7,683:1	9	8,122:1	8	8,556:1
Wahkiakum	0	3,771:0	0	4,200:0	0	3,343:0

Table 30 Veterinarians (Continued)

Planning Region and County	1968		1969		1970	
	NUMBER	RATIO	NUMBER	RATIO	NUMBER	RATIO
UPPER COLUMBIA	10	8,737:1	12	7,483:1	11	7,292:1
Chelan	5	8,578:1	6	7,167:1	5	7,844:1
Douglas	2	8,442:1	1	19,000:1	1	16,227:1
Okanogan	3	9,200:1	5	5,500:1	5	4,952:1
YAKIMA VALLEY	27	6,782:1	30	6,178:1	30	5,564:1
Kittitas	9	2,550:1	10	2,530:1	10	2,469:1
Yakima	18	8,898:1	20	8,000:1	20	7,112:1
COLUMBIA BASIN	13	5,061:1	15	4,422:1	16	3,816:1
Adams	3	3,930:1	5	2,400:1	5	2,237:1
Grant	5	8,676:1	5	8,826:1	6	6,751:1
Lincoln	5	2,125:1	5	2,040:1	5	1,875:1
FOUR RIVERS	11	9,007:1	14	7,179:1	15	6,547:1
Benton	8	8,949:1	11	6,618:1	12	5,310:1
Franklin	3	9,162:1	3	9,233:1	3	8,497:1
NORTH EAST	5	5,743:1	5	5,680:1	5	5,244:1
Ferry	1	3,898:1	1	3,600:1	1	3,530:1
Pend Oreille	1	7,201:1	1	6,500:1	1	5,759:1
Stevens	3	5,872:1	3	6,100:1	3	5,643:1
SPOKANE	29	10,344:1	39	7,692:1	38	7,449:1
Spokane	29	10,344:1	39	7,692:1	38	7,449:1
SOUTH EAST	33	1,612:1	36	1,525:1	33	1,625:1
Asotin	3	4,812:1	2	7,400:1	2	6,696:1
Garfield	2	1,652:1	4	925:1	4	698:1
Whitman	28	1,267:1	30	1,213:1	27	1,387:1
BLUE MOUNTAIN	7	7,230:1	10	4,990:1	11	4,092:1
Columbia	0	5,005:0	0	5,000:0	0	4,290:0
Walla Walla	7	6,515:1	10	4,490:1	11	3,702:1
Unknown	28		0		0	
STATE TOTAL	469	7,020:1	527	6,484:1	526	6,352:1

REFERENCES

1. LAW REGULATING THE PRACTICE OF VETERINARY, MEDICINE, SURGERY and DENTISTRY. Department of Motor Vehicles, Division of Professional Licensing, P.O. Box 649, Olympia, WA 98501

2. THE VETERINARIAN IN OUR MODERN WORLD. Washington Veterinary Medical Association, Seattle, WA

3. VETERINARIANS LICENSED IN WASHINGTON, March 1970. Health Manpower Project, Washington State Department of Social and Health Services, Division of Health, 815 Smith Tower Building, Seattle, WA 98104

ADDITIONAL REFERENCE

HEALTH RESOURCES STATISTICS, 1969. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Pp. 221-223

HEALTH MANPOWER TRAINING PROGRAMS

HEALTH MANPOWER TRAINING PROGRAMS IN WASHINGTON STATE

The purpose of this section of The Blue Book is to provide information concerning the types and location of health occupation programs available in Washington. This information is pertinent to the assessment of the supply of professionals in these occupations.

The field of education has experienced tremendous growth within the last two decades. Associated with the changes in industry and technology has been the development of education in medical care and allied health. The increase in the number of educational institutions offering training in the health occupations has been particularly striking. The community colleges and the vocational-technical institutes have been the foci of such growth. The number of community colleges in the State of Washington has increased from 9 in 1960 to 24 in 1970; most are offering technical training previously unavailable.

Professional schools, colleges and universities and the proprietory schools have grown in the number of programs offered, but not in the number of schools (when compared to the community colleges).

Many of the programs currently offered are new and experimental. They are not only offered within educational institutions but also in health facilities. A number are conducted on a cooperative basis.

Many of the tasks performed by professionals twenty years ago are now performed by technicians operating under the guidance of professionals. Graduates of professional programs today often do not perform tasks directly, but are involved in supervision and administration related to patient care. In the health occupations, there has been a consequent increase in the number of short-term continuing education courses demanded and needed by professional and allied workers in the community. Medical facilities and educational institutions, particularly the community colleges, have expanded their programs for continued training.

Scope of This Section on Education

Discussion in this section is limited to the formal education programs leading to a degree or certification. Occupational extension courses are not covered, as these are generally offered on a demand basis, that is, when a particular short-term program is needed within a community.

A more comprehensive health career education report will be available from the Health Manpower Project later in 1971. The later report will include enrollment and graduation figures, program descriptions, and information on student financial aid for health careers. Also, programs from private vocational schools and the hospital training programs will be listed.

Method of Data Collection

A survey of educational institutions offering courses and programs in the health occupations was conducted, supplemented by analysis of the following sources:

a) school catalogues and brochures;
b) national publications and research reports (see bibliography);
c) personal interviews with representatives of the institutions.

Four-year colleges and universities, two-year community colleges, those vocational-technical schools with health occupation training programs and public school districts and high schools were surveyed. A total of 48 questionnaires were mailed out. Of the institutions surveyed, 83% responded.

Hospitals and proprietary schools (business colleges) train individuals in various health occupations. However, because the data analysis for these institutions is still in process, they have not been included in this report.

Explanation of Professional Preparation

In general, all health occupational training programs required a high school completion certificate (diploma or a General Equivalency Diploma). There are, however, many programs of on-the-job training and continuing education where this certificate is not required, or if it is, can be obtained during the course of the training. There is a great deal of flexibility in the community college programs wherein an individual may attend classes on a part time basis and maintain employment at the same time. In this case, the time required to complete the study period will, of course, be much longer than for the full time student.

Readers should be aware that certification in some cases may imply acceptance by one or more professional organizations and in other cases refer to the completion of a certain course of study. Wherever possible, we have indicated this difference.

Degree programs are usually of four distinct types: 1) Associate of Applied Arts or Sciences, granted upon completion of most two-year occupational programs; 2) Bachelor of Arts or Sciences, usually in a particular field, granted by four-year colleges and universities after completion of a planned program, normally four years in length; 3) Professional degrees, (M.D., D.D.S., D.V.M., ect.) granted by professional schools upon completion of a specific program which generally includes some internship or externship; 4) Graduate degrees, (M.A., Ph.D., etc.) granted by universities and some colleges upon completion of a planned program which generally includes research in a specialized area. In addition to the four mentioned above, Community Colleges in the state grant an Associate of Arts or Sciences Degree, indicating the eligibility of the student to transfer to a four-year institution to complete his education. Diploma nursing certificates are available through hospital programs in nurse training. Further information concerning a specific degree program may be obtained by contacting the school offering the training desired.

The following Table 31 lists the various training programs available in the health occupations and the educational levels available in each program. The levels are: less than two years; associate degree; baccalauriate degree; first professional degree; Master's degree; and the Doctor of Philosophy. Each of these programs is available in the State of Washington. Programs that are listed in the column "less than 2 years" have the shortest training period indicated in parentheses, e.g. (7 months).

Available - indicates that the training program may be terminated at that point and employment is possible

Required - indicates that the degree or certificate must be reached prior to entering formal training program

Preferred - indicates that the degree level is preferred by the admitting institution in particular program but is not required.

Table 31 EDUCATIONAL LEVELS AVAILABLE BY PROGRAM

TYPE OF PROGRAM	Less than 2 years	Associate Degree	Baccalaureate Degree	First Professional	Master's Degree	Doctor of Philosophy
Bacteriology	-	-	Avail.	-	Avail.	Avail.
Biochemistry	-	-	Avail.	-	Avail.	Avail.
Biophysics	-	-	Req.	-	Avail.	Avail.
Biological Structure	-	-	Req.	-	Avail.	Avail.
Biomathematics	-	-	-	-	Avail.	Avail.
Cardiopulmonary Technology	-	Avail.	-	-	-	-
Central Service Technician	Avail. (6 mos.)	-	-	-	-	-
Clinical Psychologist	-	-	Req.	-	Avail.	Avail.
Cytotechnology	-	-	-	-	-	-
Dentistry	-	-	Pref.	DDS	Avail.	-
Dental Assistant	Avail. (9 mos.)	Avail.	-	-	-	-
Dental Hygiene	-	Avail.	Avail.	-	-	-
Dental Laboratory Technology	-	Avail.	-	-	-	-
Dietitian	-	-	Avail.	-	*	*
Environmental Health	-	-	Avail.	-	Avail.	Avail.
Food Service	-	Avail.	Avail.		Avail.	Avail.
Health Education	-	-	Req.	-	Pref.	Avail.
Hospital Executive Housekeeper	-	-	Avail.	-	*	*
Inhalation Therapy	Avail. (11 mos.)	Avail.	-	-	-	-

* Available in related Fields

Table 31 Educational Levels Available by Program (Continued)

TYPE OF PROGRAM	Less than 2 years	Associate Degree	Baccalaureate Degree	First Professional	Master's Degree	Doctor of Philosophy
Laboratory Assistant	Avail. (11 mos.)	Avail.	-	-	-	-
Medical Assistant	Avail. (7 mos.)	-	-	-	-	-
Medical Photographer	-	Avail.	-	-	-	-
Medical Record Librarian	-	-	Avail.	-	-	-
Medical Record Technician	Avail. (9 mos.)	Avail.	-	-	-	-
Medical Secretary	Avail. (9 mos.)	Avail.	-	-	-	-
Medical Technology	-	Avail.	Avail.	-	*	*
Medicine*	-	-	-	M.D.	Avail.	Avail
Mental Health Technician	-	Avail.	-	-	-	-
Mental Retardation Technician	-	Avail.	-	-	-	-
Microbiology	-	-	Avail.	-	Avail.	Avail.
Nurse Aide/Orderly	Avail. (3 mos.)[1]	-	-	-	-	-
Nurse (R.N.)	-	Avail.	Avail.	-	Avail.	*
Nurse (LPN)	Avail. (10.5 mos.)	Avail.	-	-	-	-
Nursing Unit Clerical Assistant	Avail. (4 mos.)	-	-	-	-	-
Occupational Therapy	-	-	Avail.	-	*	*

* Available in related fields

1. State recommended minimum 8 weeks (240 clock hours)

Table 31 Educational Levels Available by Program (Continued)

TYPE OF PROGRAM	Less than 2 years	Associate Degree	Baccalaureate Degree	First Professional	Master's Degree	Doctor of Philosophy
Occupational Therapy Assistant	-	Avail.	-	-	-	-
Pathology	-	-	-	-	Avail.	-
Pharmacy	-	-	Avail.	-	Avail.	Avail.
Physical Medicine & Rehabilitation	-	-	-	-	Avail.	-
Physical Therapy	-	-	Avail.	-	*	-
Physical Therapy Assistant	-	Avail.	-	-	-	-
Recreation Therapist	-	-	Avail.	-	*	*
Social Work	-	-	Avail.	-	Avail.	Avail.
Surgical Technician	Avail. (6 mos.)	-	-	-	-	-
Radiologic Technology	-	Avail.	Avail.	-	*	*
Veterinary Medicine	-	-	Pref.	DVM	Avail.	Avail.
Veterinary Assistant	-	Avail.	-	-	-	-
Ward Clerk	Avail. (4 mos.)	-	-	-	-	-

* Available in related fields

It is assumed that health occupations training programs will continue to expand in numbers as the need for more trained personnel rises and the supply of adequate teachers increases. The following table provides a basis for comparison by showing percentages of community colleges and vocational-technical institutes presently offering the various programs. Points of reference to identify patterns and rates of growth or change may be established. The information could be utilized by planners concerned with the creation of new or continuation of established health occupation training programs.

Table 32

Percentage of Schools Offering
One or More Health Programs

Program	Percent
Dental Assisting	21%
Dental Laboratory Technology	7%
Dental Hygienist	11%
Medical Labortory Technology	7%
Nurse, Associate Degree	46%
Nurse, LPN	68%
Nurse Aide/Orderly	25%
Surgical Technician	4%
Occupational Therapy Assistant	4%
Physical Therapy Assistant	4%
Radiologic Technology	14%
Mental Health Technician	4%
Mental Retardation Technician	4%
Inhalation Therapy	11%
Medical Assistant (physician's office)	18%
Central Service Technician	4%
Food Service Supervisor	4%
Cardio-pulmonary Technician	4%
Medical Photography	4%
Medical Record Technician	11%
Medical Secretary	54%
Veterinary Assistant	4%
Nursing Unit Clerical Assistant (Ward Clerk)	7%

The following chart indicates the four year colleges and universities, the community colleges, the vocational-technical institutes and public schools in Washington State and the health occupations training programs they offer.

LOCATION OF HEALTH OCCUPATION TRAINING PROGRAMS

PROGRAM INSTITUTION	BACTERIOLOGY	BIOCHEMISTRY	BIOPHYSICS	BIOMATHEMATICS	BIOLOGICAL STRUCTURE	CARDIO-PULMONARY TECHNOLOGY	CENTRAL SERVICE TECNICIAN	CLINICAL PSYCHOLOGIST	CYTOTECHNOLOGY	DENTISTRY	DENTAL ASSISTING	DENTAL HYGIENE	DENTAL LABORATORY TECHNOLOGY	DIETITIAN	ENVIRONMENTAL HEALTH	FOOD SERVICE SUPERVISOR	HEALTH EDUCATION	HOSPITAL EXECUTIVE HOUSEKEEPER	INHALATION THERAPY	MEDICAL ASSISTANT	MEDICAL LABORTORY ASSISTING	MEDICAL PHOTOGRAPHER	MEDICAL RECORD LIBRARIAN	MEDICAL RECORD TECHNICIAN	MEDICAL SECRETARY	MEDICAL TECHNOLOGY	MEDICINE	MENTAL HEALTH TECHNOLOGY	MENTAL RETARDATION TECHNOLOGY	MICROBIOLOGY	NURSE (BACCALAUREATE)	NURSE (ASSOCIATE DEGREE)	NURSE LPN	NURSE AID/ORDERLY	NURSING UNIT CLERICAL ASSISTANT	OCCUPATIONAL THERAPY	OCCUPATIONAL THERAPY ASSISTANT	PATHOLOGY	PHYSICAL MEDICINE & REHABILITATION	PHYSICAL THERAPY	PHYSICAL THERAPY ASSISTANT	RECREATION THERAPIST	SOCIAL WORK	SURGICAL TECHNICIAN	RADIOLOGIC TECHNOLOGY	VETERINARY MEDICINE	VETERINARY ASSISTANT	PHARMACY
Four-Year Colleges & Universities																																																
Central Wn State College																	●																									●						
Eastern Wn State College												●																																				
Gonzaga University																										●					(1)																	
Pacific Lutheran Univ.																															●																	
Seattle Pacific College																															●																	
Seattle University																															●																	
Univ. Of Puget Sound																										●										●												
University of Washington	●	●	●	●	●			●		●		●		●	●		●	●								●	●			●	●					●		●	●	●		●	●					●
Walla Walla College																															●																	
Washington State Univ.	●													●	●		●																								●				●		●
Western Wn State College																																																
Community Colleges & Vocational-Technical Institutes																																																
Bellevue Comm. College																●						●										●													●			
Bellingham Voc-Tech											●																						●															
Big Bend Comm. College																									●								●															
Centralia College																																	●															
Clover Park Voc-Tech											●									●	●												●	●	●													
Columbia Basin College																									●							●	●															
Edmonds Comm. College											●																																					
Everett Comm. College																																●	●															
Ft. Steilacoom Comm. Col.																									●			●	●																		●	
Grays Harbor College																																	●															
Green River Comm. College																																	●				●				●							
Highline College							●												●						●							●																
Lower Columbia College																									●							●	●	●														
Olympia Voc-Tech (2)											●									●															●													
Olympic College																																●	●															
Peninsula College																																	●															
Clark College												●													●							●	●															
Seattle Comm. College (3)											●		●							●	●				●							●	●											●				
Shoreline Comm. College												●												●								●																
Skagit Valley College (2)																									●								●	●														
Spokane Comm. College											●									●				●	●							●	●	●														
Tacoma Comm. College (1)																								●	●							●													●			
L.H. Bates Tacoma Voc-Tech											●		●																				●	●														
Walla Walla Comm. College																									●							●	●															
Wenatchee Valley College (2)																									●								●												●			
Yakima Valley College												●													●							●	●												●			
Other Health Occupations Training schools(4)																																																
Clarkston School LPN																																	●															
Lower Yakima LPN Prog.																																	●	●														
Sunnyside School Dist.																																		●														
Elma High School																																		●														
Arlington High School																																		●														
Quincy High School																																		●														
Ephrata High School																																		●														
Omak High School																																		●														
Odessa Cons. District																																		●														

Footnotes:

1. Affiliate programs only
2. Information taken from school catalogue
3. Three campuses (North, South, Central)
4. Other programs are being added in this area

The following list contains the names and addresses of four-year colleges and universities, community colleges and vocational-technical schools, and school districts offering health occupation training and the CHP district in which they are located.

Four-Year Colleges and Universities

NORTH PUGET SOUND

Western Washington State College
Bellingham 98225

CENTRAL PUGET SOUND

Pacific Lutheran University
South 121st and Park
Tacoma 98447

Seattle Pacific College
3307 Third Avenue West
Seattle 98119

Seattle University
12th and East Columbia
Seattle 98122

University of Puget Sound
1500 North Warner
Tacoma 98416

University of Washington
Seattle 98105

YAKIMA VALLEY

Central Washington State College
Ellensburg 98926

SPOKANE

Eastern Washington State College
Cheney 99004

Gonzaga University
E. 502 Boone
Spokane 99202

SOUTHEAST

Washington State University
Pullman 99163

BLUE MOUNTAIN

Walla Walla College
340 South Park
College Place 99324

Community Colleges and Vocational-Technical Institutes

	Community College District
NORTH COAST	
Peninsula College Boulevard and Ennis Port Angeles 98362	1
SOUTH COAST	
Grays Harbor College College Heights Aberdeen 98520	2
NORTH PUGET SOUND	
Bellingham Vocational-Technical Institute Bellingham 98225	21
Skagit Valley College 2405 College Way Mount Vernon 98273	4
CENTRAL PUGET SOUND	
Bellevue Community College 3000 145th Place S.E. Bellevue 98004	8
Clover Park Vocational-Technical School 4500 Steilacoom Boulevard S.W. Lakewood 98499	11
Edmonds Community College 20000 68th West Lynnwood 98036	5
Everett Community College 801 Wetmore Avenue Everett 98201	5
Fort Steilacoom Community College Lakewood Center Tacoma 98499	11

Central Puget Sound (Cont.)	Community College District
Green River Community College 12401 S.E. 320th Street Auburn 98002	10
Highline Community College Box 1000, 2660 South 240th Midway 98031	9
L. H. Bates Vocational-Technical Institute 1101 South Yakima Tacoma 98405	22
Olympic College 15th and Chester Bremerton 98310	3
Seattle Community College (Central Campus) 1718 Broadway Seattle 98122	6
Seattle Community College (North Campus) 9600 Burke Avenue North Seattle 98103	6
Seattle Community College (South Campus) 5925 3rd South Seattle 98108	6
Shoreline Community College 16101 Greenwood Avenue North Seattle 98133	7
Tacoma Community College 5900 South 12th Street Tacoma 98365	22
SOUTH PUGET SOUND	
Centralia College P.O. Box 639 Centralia 98531	12
Olympia Vocational-Technical Institute Olympia 98501	12
LOWER COLUMBIA	
Clark College 1800 East McLoughlin Boulevard Vancouver 98663	14

	Community College District
COWLITZ-WAHKIAKUM	
Lower Columbia College 1600 Maple Longview 98632	13
UPPER COLUMBIA	
Wenatchee Valley College 1300 Fifth Street Wenatchee 98801	15
YAKIMA VALLEY	
Yakima Valley College 16th and Nob Hill Boulevard Yakima 98902	16
COLUMBIA BASIN	
Big Bend Community College Highway 17 and Nelson Road Moses Lake 98837	18
FOUR RIVERS	
Columbia Basin Community College 2600 North Case Street Pasco 99301	19
SPOKANE	
Spokane Community College W. 3410 Fort George Wright Drive Spokane 99204	17
BLUE MOUNTAIN	
Walla Walla Community College 340 South Park Walla Walla 98362	20

School Districts

Arlington High School #16
South French
Arlington 98223

Clarkston Public Schools #J-250-185
847 - 6th
Clarkston 99403

School Districts (Cont.)

Elma High School #68
Elma 98541

Ephrata High School #165
415 C Northwest
Ephrata 98823

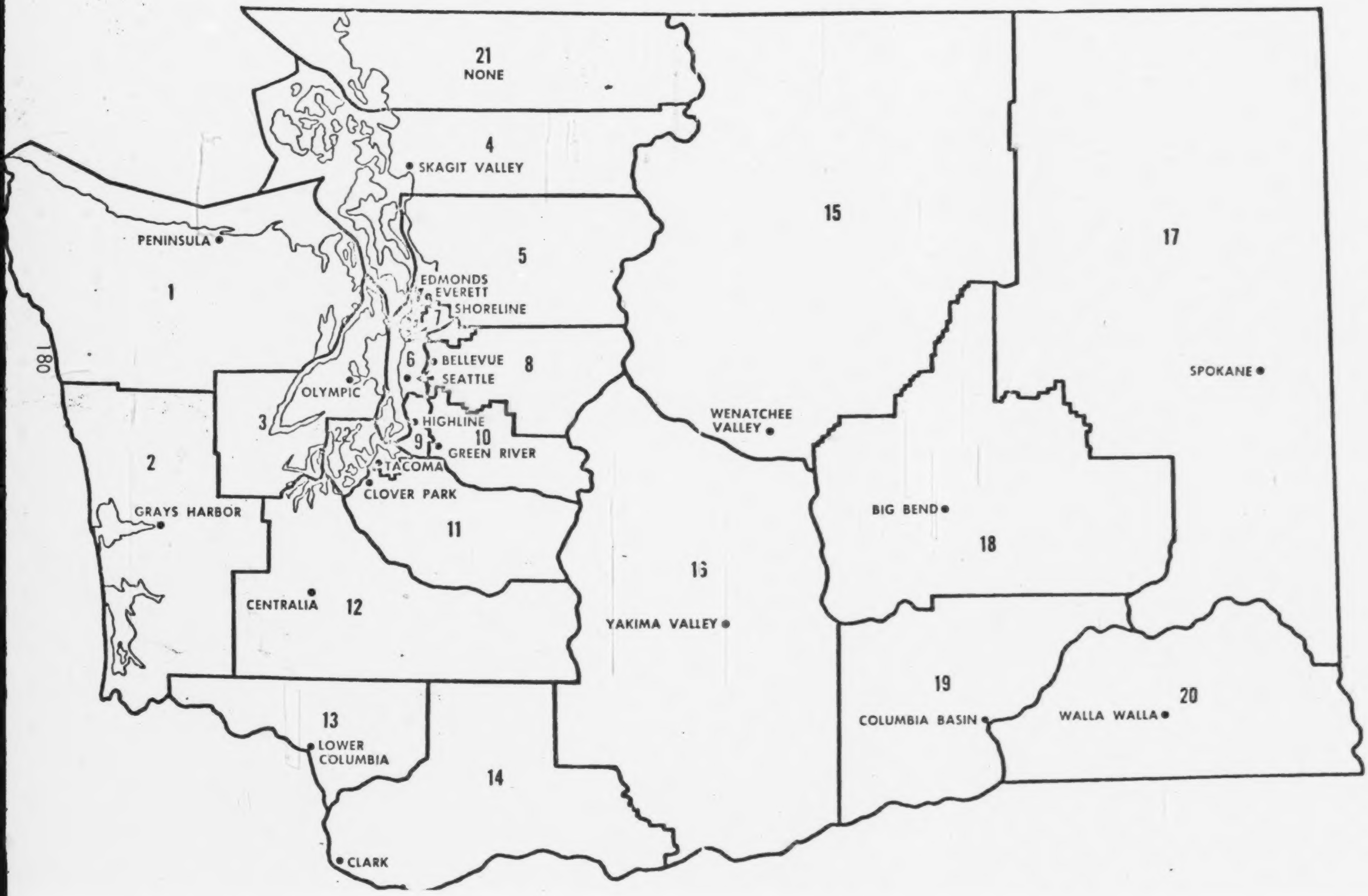
Grandview School District #116-200
West 2nd and Euclid
Grandview

Odessa High School #105-157-166J
102 East 3rd
Odessa 99159

Omak High School #19
320 West 2nd
Omak 98841

Sunnyside High School #201
16th and Edison
Sunnyside 98944

Figure 13 STATE OF WASHINGTON -- THE COMMUNITY COLLEGE SYSTEM


21
NONE
4
SKAGIT VALLEY
15
17
PENINSULA
5
1
EDMONDS
EVERETT
7
SHORELINE
6
BELLEVUE
SEATTLE
8
SPOKANE
OLYMPIC
3
HIGHLINE
22
9
10
GREEN RIVER
WENATCHEE VALLEY
2
TACOMA
CLOVER PARK
GRAYS HARBOR
BIG BEND
11
18
16
CENTRALIA
12
YAKIMA VALLEY
19
20
13
COLUMBIA BASIN
WALLA WALLA
LOWER COLUMBIA
14
CLARK

REFERENCES

1. HEALTH RESOURCES STATISTICS, 1969. U.S. Public Health Service Publication 1509, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

2. HEALTH CAREERS GUIDEBOOK, 1965. U.S. Department of Labor No. 0-783-119. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

3. VOCATIONAL EDUCATION AND OCCUPATIONS, OE-80061. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

4. HEALTH CAREERS IN WASHINGTON STATE, Revised June 1969. Washington State Hospital and Research Foundation, 601 Broadway, Seattle, WA 98122

5. CAREER CHOICE AND CAREER PREPARATION■Schill et al. Interstate Printer and Publishers, Inc., Danville, IL 61832

6. MAPPING YOUR OCCUPATIONAL TRAINING IN THE STATE OF WASHINGTON: 1968. State Division of Vocational Education, Coordinating Council for Occupational Education, P.O. Box 248, Olympia, WA 98501

7. DICTIONARY OF OCCUPATIONAL TITLES, Volume 1: 1965. Definition of Titles, Third Edition, U.S. Department of Labor, Manpower Administration, Bureau of Employment Security. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Members of the

State of Washington

ADVISORY COUNCIL TO THE HEALTH MANPOWER PROJECT

Dorothy Asplund
Division of Vocational Education
Health Occupations Section

Frank Baker
Comprehensive Health Planning Office
Planning and Community Affairs Agency

Reed Bement
Washington State Pharmaceutical Association

John Bigelow
Washington State Hospital Association

Max Brokaw
Division of Professional Licensing
Department of Motor Vehicles

Elizabeth L. Byerly, Ph.D.
School of Nursing
University of Washington

George A. Forsyth
Washington State Health Facilities Association

Richard Fowler
Washington State Pharmaceutical Association

Richard Gorman
Washington State Medical Association
Chairman

William R. Hogarty
Regional Health Planning Council, Inc.

Merriam Lathrop
Washington State Nurses Association

Henry Mudge-Lisk
Puget Sound Comprehensive Health Planning Board

Henry Polis
State Board for Community College Education

Lawrence J. Sharp, Ph.D.
Washington/Alaska Regional Medical Program

Lyle M. Tinker
Employment Security Department

Vern Vixie
Washington State Dental Association

Staff

Jess B. Spielholz, M.D., MPH
Deputy Assistant Secretary
Health Services

Ilse J. Volinn, Ph.D.
Project Administrator

Jo M. Senters, M.A.
Research Analyst

David Trapp, M.S.
Educational Consultant

Thomas W. Steinburn, Ph.D.
Data Analysis Consultant

Gil Scott
Data Processor

Margaret Kroshus
Secretary

Members of the State of Washington COMPREHENSIVE HEALTH PLANNING ADVISORY COUNCIL

Thomas W. Anderson
Mrs. John L. Aram
Edward H. Banks
Robert H. Bedrossian, M.D.
Byron Brady
Charles B. Brink, Ph.D.
Hon. Louis Bruno
Mrs. Russell Chadwick
Reed L. Clegg
Miss Marguerite Cobb
W. R. Conte, M.D.
Robert W. Day, M.D.
John V. Deshaye, M.D.
Elmer Eid
Paul W. Ellis, Ph.D.
Miss Mary Lou Everson
Hon. Caswell J. Farr, D.D.S.
Mrs. Joyce Fields
Donald E. Foster, D.D.S.
Hon. Kenny Foulkes
James W. Haviland, M.D.
  Chairman
David Hicks, Ph.D.
James L. Hobbs
Mrs. H. H. Horne
Walter C. Howe, Jr.
William F. Ingram
  Vice Chairman
Walter J. Kennedy, M.D.
Samuel Kinville
Mrs. George Lamb
Wallace Lane, M.D.
Roger Larson
Ludwig Lobe
Richard Lubben
Kenneth M. McCaffree, Ph.D.
Charles M. McGill, M.D.
James McKay
Ivan Merrick
Mrs. Hazel Mori
DeMaurice Moses, M.D.
Charles D. Muller, M.D.
John A. E. Naess, Jr.
Hon. David H. Rodgers
Richard A. Setter
Donal R. Sparkman, M.D.
Richard R. Stacey, M.D.
John R. Wilkey, M.D.
Mrs. Harriet Williams
Martin Yanez

Staff

Frank Baker
  Administrator

Verne Gibbs
  Health Planner

Rhoda Fletcher
  Secretary

Frank Anderson
  Health Planner

Harold Nickerson
  Community Affairs Consultant

Lynn Rodriguez
  Secretary